

## **Historic, archived document**

Do not assume content reflects current scientific knowledge, policies, or practices.



62.09

# AGGELER & MUSSER

## SEED CO.

### LOS ANGELES



**A&M**  
reliable  
SEEDS

Thirty-Second  
ANNUAL  
CATALOG  
1925

# HOW TO ORDER BY MAIL

**YOUR NAME AND ADDRESS**—Be sure that your name and address are written very plainly on each order. We frequently receive orders with either the name or the address omitted.

It is important that you fill out plainly and in full the mail order blank which accompanies this catalog. This will avoid delay in your order. If your order does not reach you promptly please notify us.

**CASH WITH ORDER**—Remittances should be made by post office money order, express money order or bank draft for a sufficient amount to cover the entire order and required postage if any. Stamps of 2 cent denomination will be accepted for small amounts.

**DO NOT SEND CURRENCY.** Should it be lost there is no recourse.

**PRICES**—Prices in this catalog cancel all previous issues and are subject to market fluctuations and to change without notice. For quantity prices write for current quotations.

**SHIPPING**—We will use our best judgment as to the most efficient way of sending orders when specific directions are not given. If special directions in shipping are needed, state them explicitly in space provided for them on order blank.

## SEEDS BY MAIL

Parcel post rates apply on weights up to 70 lbs. in the first, second and third zones (see table below) and in all zones of 300 miles or more the limit weight is fifty pounds. Parcel post rates are usually cheaper than express with the added advantage of having the parcel delivered to your door. We pay postage on everything priced postpaid but on figuring postage for larger orders please refer to the rate table below. Poisons are not mailable. They must be sent by express or freight. We also advise sending heavy hardware and long handle tools by express or freight as many of them are not mailable. We are constantly in touch with shipping regulations and very often if we are allowed the privilege of using our own judgment we can make a saving to our customers. If you are in doubt about how shipment should be made and wish to leave it for us to decide, mark shipping instructions on your order sheet "cheapest way."

All orders that must be shipped into **Mexico** have an extra charge, viz., all orders to the value of \$5.00 to \$50.00 require \$1.00 extra and all orders above \$50.00 require \$2.00 extra for consular fees.

**FOREIGN PARCEL POST**—The parcel post rate to foreign countries is 12 cents per lb. Foreign correspondents should add a sufficient amount to cover postage at this rate, if not ordering postpaid articles.

DOMESTIC PARCEL POST RATES					First Pound or Fraction	Each Additional Pound or Fraction
On Seeds, Plants, Bulbs, Roots, Books, Tools, etc. within the U. S. and Possessions						
First Zone, Los Angeles and within 50 miles of Los Angeles					5c	1c
Second Zone within 50 to 150 " " " "					5c	1c
Third Zone 150 to 300 " " " "					6c	2c
Fourth Zone 300 to 600 " " " "					7c	4c
Fifth Zone 600 to 1,000 " " " "					8c	6c
Sixth Zone 1,000 to 1,400 " " " "					9c	8c
Seventh Zone 1,400 to 1,800 " " " "					11c	10c
Eighth Zone all over 1,800 " " " "					12c	12c

**NON-WARRANTY: Note**—There are so many contingencies to be encountered in growing plants from seed and in setting out plants that are dependent on the weather and other conditions over which we have no control, that success in planting is not altogether dependent on the seed or plant. We will send out only seed which we believe will grow and produce the kind of plant and variety represented, but:

Aggeler & Musser Seed Co. give no warranty, expressed or implied, as to description, quality, productiveness, or any other matter of any seeds, bulbs, plants or trees they send out, and they will not be responsible in any way for the crop.

## AGGELER & MUSSER SEED CO.

# Thirty-second Annual Catalog of the Aggeler & Musser Seed Company

ESTABLISHED 1893.



Our Retail Store at 750 South Spring Street



Our Market Branch Store is at 767 South Central Avenue, opposite the Terminal Market. It is a busy place in the early morning market hours.

Reports come to us from many growers, often because of extraordinary successes but more frequently the failures are reported, and it is up to the seedsman to know the cause of such failures. Here are some of the causes.

## SOIL

Not chemically or physically adapted to the requirements of the crop.  
Not properly prepared.  
Too much or too little moisture.

## CLIMATE

Variety planted out of its season.  
Unseasonable weather.  
Extremes of heat and cold.  
Excessive rain or drouth.

## CULTURE

Variety not adapted to conditions.  
Improper planting.  
Improper cultivation.  
Improper irrigation.  
Improper fertilization.  
Inattention to insects and diseases.

## SEED

Unwise selection of variety.  
Inattention to purity and germination.  
Indifference as to pedigree and source.

OUR RETAIL store at 750 South Spring Street is an ideal California seed house. In this place everything pertaining to gardening may be found.

Our bulb department offers many varieties to be planted each season that you may have flowers throughout the year.

Our seed and bulb catalogs aim to give all information necessary to guide you in the proper selection for each season.

Seeds, plants, fertilizers, sprays and sprayers, garden tools, garden hose, bee and poultry supplies, lawn mowers, birds and bird cages, gold fish and small aquariums.

In order that this store may be attractive and interesting we have an aquarium of gold fish, and a bird department in which we carry a full line of canaries trained to sing, warble or roll. Also food and supplies for all pet animals.

These things add much to the cheer of a home and to the comfort of invalids and to persons who are much alone.

Being centrally located at Eighth and Spring Streets, it is convenient to all who visit the downtown section of the city. If you would avoid delay, telephone your order to be ready at a certain hour. It will be at the Call Counter for you when you arrive.

## Where Market Gardeners Buy

Our Market Store at 767 South Central Avenue, is the most complete institution of its kind. Here we are headquarters for Market gardeners throughout the Southwest and old Mexico. From this store we have experienced salesmen radiating daily into every garden section around Los Angeles, soliciting orders and delivering merchandise and giving expert advice. The manager and every salesman at the store is an expert seedsman, competent to advise intelligently, you will do well to consult with them when making your purchase, whether you buy seeds, fertilizers or insecticides.

## Bee and Poultry Supplies

For the greater convenience of our rural customers who need Poultry and Bee Supplies, our headquarters for these departments are at our Market Branch Store where we have expert salesmen who can advise on these subjects.

## Our Trial Garden

In our trial garden we plant seeds of vegetables as soon as they are received (if at the proper season). Within eight or ten weeks we can determine if they are true to type, and the purity.

It is in this garden we get much practical experience with culture, good and bad, with fertilizers, with diseases, with insects and their remedies. This is service that protects the customer.



Our Warehouse and Mill at 1934 East 15th Street; Size of Warehouse 110x230; Size of Mill 60x60.

## Main Office and Mail Order Department, Mill and Warehouse.

The great majority of our customers live out of town and come into the city with their cars, they find it very unpleasant to drive through the business section and inconvenient to abide by the parking regulation. The frequency of complaints has lead us to the conclusion that we could better serve our patrons at the warehouse at 1934 East Fifteenth Street on the main paved thoroughfare from Alameda Street to Santa Fe Avenue. There is no parking limit in this district. It is close in and very convenient to reach by auto. We invite all our wholesale customers to call at our offices at the warehouse, where it is a pleasure to wait upon you, to

show you the merchandise and make immediate delivery, which is a great convenience to customers, wholesale and retail, who come with their cars.

At this warehouse we are prepared to wait upon all retail customers who will find it more convenient to deal here.

It is here we can show you the great work that is necessary to run a big up-to-date seed house. You will be interested to see our cleaning mills, the mail order and shipping departments. After a visit here you will appreciate the great work we are doing to serve you and to safeguard your interests. We invite you to come to our warehouse and see for yourselves.

## Our Mail Order Department

This department occupies a space in the warehouse 70x100 feet. This department is a large institution in itself. We have a packet filling machine which fills all packets with equal portions of seeds and seals them. It has a capacity of sixty thousand packets per day.

This department requires the full service of several efficient clerks whose sole duty is to receive the orders, read them, if correct, give them the O. K., numbers and record them IN. After they have been filed by an army of clerks, they are again checked up, weighed, stamped and recorded OUT.

This system has brought many favorable compliments from customers regarding our efficiency.

## THIS SEED CATALOGUE

Once a year this Seed Catalogue comes to your home, a friendly visitor. Its illustrations reveal to you by actual photograph the results you can get from the seeds offered. Its cultural instructions are so explicit that even the inexperienced may succeed.

The general information to be found throughout this catalogue is suggestive as to what varieties are to be planted in the proper season, or for various markets, or for various uses. If you would have a good garden or if you would be a successful gardener, read this seed catalogue. See the pages concerning fertilizers, insecticides, garden tools, etc. If you would have further agricultural information not found in this catalogue, write or consult us.

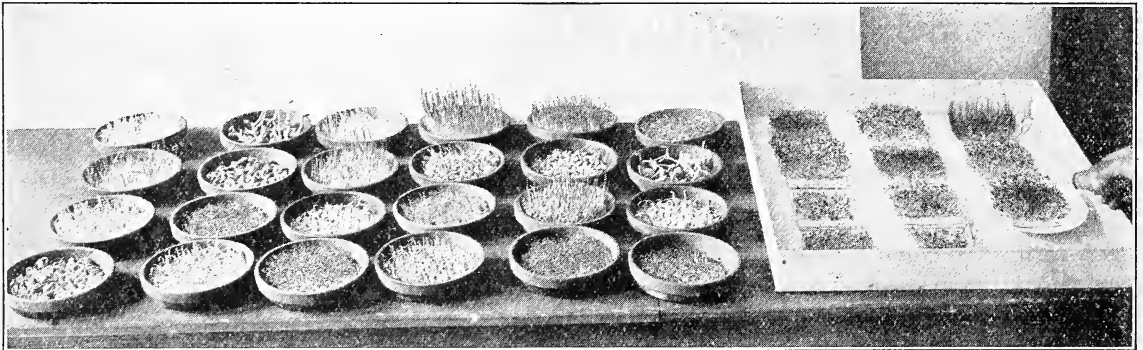
## Get Your Name on Our List

Be sure to send an order for seeds so that your name will continue on our mailing list. You will then receive our next catalog as soon as it is from the press.

## QUICK SERVICE

We aim to give the best service possible at the counter, and in order to do so we must ask your co-operation to the extent that you will have your order ready when you come into the store.

During the planting season there are many customers waiting, and competent clerks are scarce. It is for your protection that we have only experienced seedsmen behind the counter; therefore, be considerate and have your order ready.



A Laboratory Test Shows that Our Seeds Germinate

## WHAT WE ARE DOING TO SAFEGUARD OUR PATRONS FROM DISAPPOINTMENT AND LOSS

As soon as any seed is received a laboratory test is made for germination and purity and if found wanting in germination the seed is not accepted. If unclean it is at once re-cleaned.

At our trial grounds a sample of all vegetable seed is planted to test if it will grow true to type.

Our cleaning facilities are of the very best.

All of our California grown crops are inspected by us during the growing period in order to detect any impurities or off types.

Throughout this catalogue, cultural instructions and hints are given that if heeded, success is assured if cultural methods conform with the requirements of the soil.

This Laboratory is maintained all the year round safeguarding the grower against weeds, and seeds of low germination.

## Many Reasons Why You Should Be a Successful Agriculturalist

### Modern Methods of Agricultural Education

The benefits of the wonderful system of agricultural education that was started scarcely more than five years ago are already being realized in the rush for suburban homes. What will be the effect when the thousands of children who are now learning the rudiments of agriculture in the elementary schools and in the High Schools. The young people are almost full fledged farmers, learning to plow with a tractor, to raise livestock and poultry, successfully competing for the prize at the county fairs, and after the High School the Farm Bureau, headed by thoroughly competent authority trained at the State University of Agriculture and backed by that institution with the entire educational force of competent men connected with it. The Farm Bureau has the co-operation of the State Department of Agriculture working through the several county horticultural officers; and still more, all research work of the Agricultural Department of the United States is at the service of the Farm Bureau.

As soon as you read this ascertain from your Farm Bureau the fee for your county and become a member without further delay. You are missing something worth while. The Farm Bureau Monthly that comes to you free is worth many times the price of membership.

#### WHY YOU SHOULD BELONG TO THE FARM BUREAU:

1.—Because you get more real agricultural education for your investment than from any other source.

2.—You can get it when you want it, on any agricultural subject in which you may be interested.

3.—When insects are destroying your garden, when your plants are dying from disease, your farm advisor will tell you what to do.

4.—When your poultry or livestock are sick, consult your farm advisor.

5.—With the aid of the Farm Advisor you should have the best of everything, whether it be livestock or crops of any kind.

6.—You can get advertising, and much assistance in marketing your crops.

7.—You are co-operating with approximately one million members of the American Farm Bureau Federation, all working to better conditions for the real farmer.

Attend the Fruit Growers and Farmers Conventions held somewhere during October each year. Also be sure to attend the Farm Bureau meetings.

The Farm Bureau Monthly advises you where and when there will be a meeting of Dairymen, Poultrymen, Grape Growers, growers of citrus fruit, growers of deciduous fruits, potato growers, and various other meetings. At these meetings every phase of the subject is discussed so that each one may learn the causes of their respective failures and how to avoid them.

## AN EDUCATIONAL CATALOG

For more than thirty years we have given much space in this catalog to disseminate information concerning the culture of the various vegetables and flowers. It seemed the logical thing to do so that the instructions given would guide the amateur in the selection of his seed with regard to seasons in order that he could more intelligently guard against crop failures and to grow the crops that were "Best Sellers." We have aimed to make this an educational catalog.

The United States Department of Agriculture and the Agricultural Department of the State of California are constantly printing for free distribution, bulletins and circulars on various subjects. These bulletins are referred to in this catalog on the proper pages so that it cannot escape your notice. If interested write for it.

When you have agricultural troubles, particularly with regard to insects and diseases, consult with the Horticultural Department of your county. You will receive intelligent advice.

## Agricultural Courses by Mail are Popular

An excellent means of obtaining a knowledge of the fundamentals of agriculture is afforded by the correspondence courses offered by the University of California college of agriculture. These courses are intended primarily for those who are already engaged in agricultural pursuits, or prospective farmers. When an intending student enrolls by sending his application and the fee of \$2 for a selected course to the Division of Agricultural Education, University of California, Berkeley.

## The Agricultural Department of the Chamber of Commerce

This department specializes in giving aid to the newcomer who, unacquainted with Southern California and local conditions, would buy a small ranch need only to apply to Dr. George W. Clements, Secretary of the Agricultural Department of the Los Angeles Chamber of Commerce. You will then be guided aright, and may be saved the embarrassment of a costly mistake.

To the newcomer looking for a home, we advise you to consult or write the Agricultural Department of the Los Angeles Chamber of Commerce.

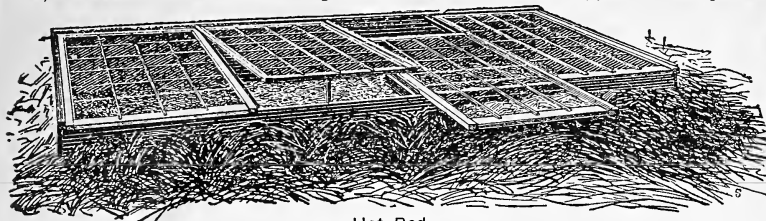
## UNIVERSITY OF CALIFORNIA COLLEGE OF AGRICULTURE Station Publications Available for Free Distribution

- Bulletins**
261. Melaxuma of the Walnut, "Juglans regia."
  270. A Comparison of Annual Cropping, Biennial Cropping, and Green Manures on the Yield of Wheat.
  278. Grain Sorghums.
  279. Irrigation of Rice in California.
  280. Irrigation of Alfalfa in the Sacramento Valley.
  283. The Olive Insects of California.
  285. The Milk Goat in California.
  286. Commercial Fertilizers.
  287. Vinegar from Waste Fruits.
  294. Bean Culture in California.
  297. The Almond in California.
  298. Seedless Raisin Grapes.
  312. Mariout Barley.
  313. Pruning Young Deciduous Fruit Trees.
  319. Capriffs and Caprification.
  321. Commercial Production of Grape Syrup.
  331. Phylloxera-Resistant Stocks.
  332. Walnut Culture in California.
  336. The Preparation of Nicotine Dust as an Insecticide.
  337. Some Factors of Dehydrator Efficiency.
  341. Studies on Irrigation of Citrus Groves.
  342. Hog Feeding Experiments.
  345. Fertilizer Experiments with Citrus Trees.
  347. The Control of Red Spiders in Deciduous Orchards.
  349. A Study of Sidedraft and Tractor Hitches.
  350. Agriculture in Cut-over Lands.
  351. California State Dairy Cow Competition.
  354. Results of Rice Experiments in 1922.
  355. The Peach Twig Borer.
  356. Observations on Some Rice Weeds in California.
  357. A Self-mixing Dusting Machine for Applying Dry Insecticides and Fungicides.
  358. Black Measles, Water Berries, and Related Vine Troubles.
  360. Gum Diseases of Citrus Trees in California.
  363. The Pruning of Citrus Trees in California.
- Circulars**
70. Observations on the Status of Corn Growing in California.
  82. The Common Ground Squirrel of California.
  87. Alfalfa.
  100. Green Manuring in California.
  111. The Use of Lime and Gypsum on California Soils.
  113. Correspondence Courses in Agriculture.
  117. The Selection and Cost of a Small Pumping Plant.
  127. House Fumigation.
  136. Melilotus Indica as a Green-Manure Crop for California.
  144. Oidium or Powdery Mildew of the Vine.
  151. Feeding and Management of Hogs.
  152. Some Observations on the Bulk Handling of Grain in California.
  155. Bovine Tuberculosis.
  157. Control of the Pear Scab.
  159. Agriculture in the Imperial Valley.
  160. Lettuce Growing in California.
  161. Potatoes in California.
  166. The County Farm Bureau.
  167. Feeding Stuffs of Minor Importance.
  173. Wheat Culture.
  173. The Construction of the Wood-Hoop Silo.
  174. Farm Drainage Methods.
  184. A Flock of Sheep on the Farm.
  190. Agriculture Clubs in California.
  193. A Study of Farm Labor in California.
  198. Syrup from Sweet Sorghum.
  199. Onion Growing in California.
  201. Helpful Hints to Hog Raisers.
  203. Peat as a Manure Substitute.
  209. The Function of the Farm Bureau.
  210. Suggestions to the Settler in California.
  212. Salvaging Rain-Damaged Prunes.
  214. Seed Treatment for the Prevention of Cereal Smuts.
  215. Feeding Dairy Cows in California.
  217. Methods for Marketing Vegetables in California.
  219. The Present Status of Alkali.
  224. Control of the Brown Apricot Scale and the Italian Pear Scale on Deciduous Fruit Trees.
  228. Vineyard Irrigation in Arid Climates.
  233. Artificial Incubation.
  235. Soil Analysis and Soil and Plant Inter-relations.
  236. The Common Hawks and Owls of California from the Standpoint of the Rancher.
  238. The Apricot in California.
  239. Harvesting and Handling Apricots and Plums for Eastern Shipment.
  240. Harvesting and Handling Pears for Eastern Shipment.
  241. Harvesting and Handling Peaches for Eastern Shipment.
  242. Poultry Feeding.
  244. Central Wire Bracing for Fruit Trees.
  245. Vine Pruning Systems.
  247. Colonization and Rural Development.
  248. Some Common Errors in Vine Pruning and Their Remedies.
  250. Measurement of Irrigation Water on the Farm.
  251. Recommendations Concerning the Common Disease and Parasites of Poultry.
  252. Supports for Vines.
  253. Vineyard Plans.
  254. The Use of Artificial Light to Increase Winter Egg Production.
  255. Leguminous Plants as Organic Fertilizer in California Agriculture.
  256. The Control of Wild Morning Glory.
  257. The Small-Seeded Horse Bean.
  258. Thinning Deciduous Fruits.
  259. Pear By-products.

Any of the above publications may be obtained by addressing THE DIRECTOR, AGRICULTURAL EXPERIMENT STATION, UNIVERSITY OF CALIFORNIA, Berkeley, California.

# The Primer of Agriculture

The instructions on this page and next are so essential to the amateur and the new-comer that we repeat them from year to year. But each year brings out some new phase of agriculture, much of which we include in these columns; therefore, the reader will find something worth while that did not appear in last year's



Hot Bed

Every garden should have a hot bed in a sunny corner for the purpose of raising plants for early vegetables.

Dig a trench east and west twelve to eighteen inches deep. A bed three feet wide and ten feet long is large enough for any family garden. Board twelve inches high on the south side and 18 inches on the north side. Fill twelve inches deep with straw, manure or weeds, moisten slightly, pack tightly, cover three inches deep with sandy loam; if the loam is mixed with some A. & M. Humus or leaf-mould, it will greatly improve it. 5 lbs. of sheep manure and 1 lb. each of Toro sulphur and lime would fertilize the hot bed and do much toward destroying fungus and insects. Sow the seed in rows across the hot bed north and south, so that the sun will light both sides of the row during the day, making strong, healthy plants. Do not sow too thickly nor more deeply than one-fourth inch. Cover the hot bed with glass, not muslin. No less than twelve inches should exist between the glass and the soil. Sprinkle sufficiently to moisten the soil, but not enough to cool the manure which would then become chilled and be worse than no manure at all. Raise the glass during the day, and close at night. Without ventilation the plants may be scalded during a warm sunny day. Before transplanting from the hot bed, all plants should be hardened by exposing them to the sun for several days. Exercise proper judgment lest they be destroyed.

## THE SOIL

There are two kinds of soil in California that baffle the new gardener, and often puzzle the man of experience. One kind is the raw, unreclaimed soil that packs so hard that vegetation cannot take root. The other soil is as pliable as sand, and ought to grow anything but just will not. Both require the same solution. They need life (humus) and there is nothing better to put life into soil than a green manuring crop plowed under at the right time, and to thoroughly air the soil by cultivation.

For your garden gather weeds and dig them under. Any decaying vegetation plowed under will add humus. For the field, grow rye, vetch, mellilotus, or barley during the winter months, and in the spring plant Hubam Clover and Cow Peas. All these crops will furnish feed for the stock as well as humus to the soil. Cover crops for green manuring should be plowed under a month before planting and before sowing any seed the field should be thoroughly irrigated and cultivated. If this is not done a dry crust will form over the humus because of the air space formed by the humus.

To grow well a plant requires a deep, mellow, moist, soil, supplied with the right amount of air, heat and available plant food. An important step, then, in the successful growing of vegetables is to prepare the soil in such a way that it will be congenial to the best root growth. The soil for truck crops is a rich sandy loam—a soil containing varying proportions of clay, sand and organic matter. A good garden soil can be made in most back yards by intelligent management, and an application of two pounds each of Toro Sulphur and lime to every 100 square feet.

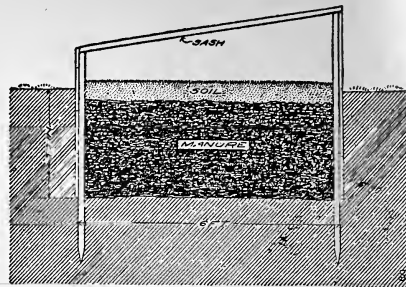
## Clay and Adobe Need Skill

Of all the garden soils, clay is the most easily injured by tilling when it is not in the right condition as to moisture. If worked too wet, the particles all slide together into a compact mass. On the other hand, if worked too dry, the clods are hard to break. When clay soil is in the right condition to work it will crumble apart if squeezed in the hand. If it sticks together it is too wet. Clay soil should never be worked when it is wet, not even with a hoe. This is an important lesson for all gardeners.

In a deep, mellow soil, the plants grow more quickly, since larger root systems can be developed and more food and moisture absorbed. A deep, mellow soil affords a larger reservoir to hold rain needed during the droughts that come in the growing season. Such a soil is warmer and contains air needed for the growing roots and for the bacteria that cause decay of organic matter or gather nitrogen from the soil air.

## A Compost Pit

Make a pit about 12 inches deep in some out-of-the-way place in the home garden. Put into it every particle of vegetation that will decay. When cleaning up burn only sticks that will not decay readily, but put the ashes into the pit with the compost. Turn the compost over with a fork and sprinkle with water whenever it shows signs of heating. This compost is valuable fertilizer, therefore do not neglect the Compost Pit.



Hot Bed, Cross Section

## A Word About Sowing Seeds

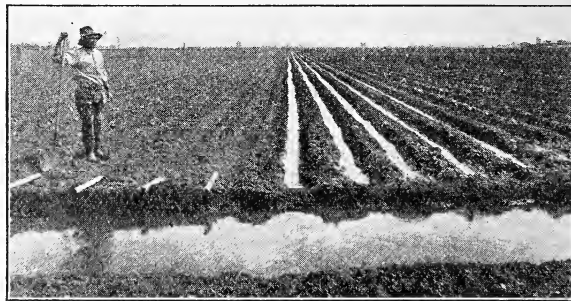
Many seeds are small and the germination weak, therefore sow them very shallow, often not more than one-eighth inch deep. This is because the germ or sprout must have air and light. If this is denied by too deep sowing, it dies before it reaches the surface. Cover the seed with A. & M. Humus.

In order to assist small or weak seeds to grow, it is advisable to plant plentifully, because the many seeds will give strength to raise the soil where one seed could not do so.

This advice applies particularly to beet and melon seeds, but it is applicable to all small seeds. It is easy to thin out the surplus plants. A good general rule is to plant seeds to a depth equal to from three to five times their diameter, make ridges to stand about six inches high, flattened to about ten inches wide on top and twelve inches between ridges. Drill the seed or transplant on each side of the ridge. Irrigate in the furrow between the ridges. By this method two rows are irrigated with one furrow. It is easy to see the advantage of this method over the usual way of drilling on level ground and irrigating each row, often flooding the plant, which is harmful, particularly during the heat of the summer. (See illustration.)

## A Few Words About Irrigation

In seed beds where small seeds are sown thickly, it is necessary to sprinkle the beds, never flood them. During the winter months, sprinkle only in the morning when the water is warmer than the dew. This allows all the heat that accumulates in the soil during the day to be retained far into the night. During the hot summer months, it will be necessary to sprinkle in the evening to revive the plants after a hot day.



Irrigating Sweet Potatoes or Other Crops

When making a garden, whether for drilling or planting seed, or setting plants, always wet the ground thoroughly. GIVE IT A GOOD SOAKING DOWN TO SUB-MOISTURE. As soon as it is tillable—that is, as soon as it can be spaded and pulverized, or when the soil will not stick to the spade, dig it 10 or 12 inches deep. Pulverize the soil thoroughly and rake it evenly. While it is still moist, plant seed from 1/4 inch to one inch deep, in heavy soil, and a little deeper in sandy soil. Planted this way, almost any variety of seed will germinate and show above the ground in from four to ten days, with irrigation. Never sprinkle in a new garden before the plant is above ground, nor after if you can irrigate between the rows. It is far better to irrigate than to sprinkle, and much less labor. Always mulch the soil after each irrigation, as soon as it mulches readily, but no sooner. To allow the soil to bake after irrigation is far worse than no irrigation at all.

To sprinkle the garden slightly each day during the summer months is of little value unless the ground is also thoroughly irrigated once each week or two, according to the nature of the soil. Slight sprinkling refreshes the foliage, but may not penetrate the soil more than one inch deep. Thus as the under soil dries, the roots get no moisture. The plants suffer, and you do not suspect the cause because you sprinkle each day. This is a common fault and the cause of many failures.

Owing to the diversity of the soil and climatic conditions of the great Southwest, it is impractical to follow without some deviation any table that might be formulated. We believe this table is as nearly correct as any table can be made, yet the time of planting must vary with each season, and so seldom are the seasons at all similar that there is always an element of risk for the man who plants early. Each month, too, requires certain varieties best suited to the season and purpose for which it is planted.

## VEGETABLE CALENDAR FOR THE HOME GARDEN

VARIETY	NO. OF PLANTS PER OUNCE OF SEED	SEED FOR 50 feet	ROWS APART	APART IN ROWS	TIME OF PLANTING	READY FOR USE
Artichoke.....	200	12 plants	4 ft.	4 ft.	Dec. to April	5 mo.
Asparagus.....	150	50 roots	20 in.	1 ft.	Dec. to April	2nd spring
Beans, Bush.....	50 to 100	2 pkts.	2 ft.	6 in.	March to Sept.	8 to 12 wks.
Beans, Pole.....	50 to 100	2 pkts.	3 ft.	12 in.	April to Aug.	10 to 12 wks.
Beans, Lima.....	30 to 60	$\frac{1}{4}$ lb.	2 ft.	10 in.	April to Aug.	12 to 14 wks.
Beets.....	300	1 pkt.	10 in.	6 in.	All year	10 to 12 wks.
Cabbage.....	2000	36 plants	20 in.	15 in.	All year	14 to 16 wks.
Carrot.....	1500	1 pkt.	10 in.	Sow	All year	8 to 10 wks.
Cauliflower.....	2000	30 plants	20 in.	18 in.	Sept. to March	14 to 16 wks.
Celery.....	.....	100 plants	20 in.	6 in.	March to Aug.	16 to 18 wks.
Corn, Sweet.....	100	1 pkt.	2 ft.	18 in.	March to Aug.	10 to 12 wks.
Cucumber.....	200	1 pkt.	4 ft.	3 ft.	March to Sept.	10 to 12 wks.
Endive.....	1000	1 pkt.	1 ft.	10 in.	Sept. to March	14 to 18 wks.
Eggplant.....	500	24 plants	2 ft.	2½ ft.	April to July	10 to 12 wks.
Kale.....	1000	30 plants	10 in.	18 in.	All year	8 to 10 wks.
Kohl Rabi.....	1000	1 pkt.	10 in.	Sow	All year	10 to 12 wks.
Lettuce.....	200	1 pkt.	15 in.	10 in.	All year	12 to 16 wks.
Musk Melon.....	200	1 pkt.	4 ft.	3 ft.	March to July	14 to 18 wks.
Water Melon.....	100	1 pkt.	6 ft.	4 ft.	March to July	16 to 20 wks.
Okra.....	150	1 pkt.	2 ft.	18 in.	April to July	10 to 12 wks.
Onion Seed.....	500	1 pkt.	10 in.	Sow	All year	24 to 28 wks.
Onion Sets.....	.....	1 lb.	10 in.	3 in.	All year	14 to 18 wks.
Parsnips.....	300	3 lb.	2 ft.	Drill	Aug. to March	14 to 18 wks.
Parsley.....	400	1 pkt.	10 in.	Sow	All year	12 to 14 wks.
Pepper.....	1000	30 plants	20 in.	18 in.	April to July	10 to 12 wks.
Potatoes.....	.....	5 lbs.	2 ft.	1 ft.	March to Aug.	10 to 14 wks.
Sweet Potatoes.....	.....	30 plants	1 ft.	1 ft.	April to July	10 to 12 wks.
Pumpkin.....	100	1 pkt.	6 ft.	5 ft.	April to July	12 to 14 wks.
Peas.....	50	$\frac{1}{4}$ lb.	2 ft.	Sow	Sept. to March	14 to 20 wks.
Radish.....	500	1 pkt.	10 in.	Sow	All year	4 to 8 wks.
Rhubarb Roots.....	.....	24 roots	3 ft.	2 ft.	Dec. to March	8 to 10 wks.
Roselle.....	150	1 pkt.	3 ft.	2 ft.	April to May	18 to 20 wks.
Salsify.....	200	1 pkt.	10 in.	Sow	Sept. to March	14 to 18 wks.
Spinach.....	200	1 pkt.	12 in.	Sow	Sept. to April	8 to 12 wks.
Squash, Summer.....	100	1 pkt.	3 ft.	3 ft.	April to Aug.	10 to 12 wks.
Squash, Winter.....	100	1 pkt.	6 ft.	4 ft.	April to Aug.	12 to 16 wks.
Tomato.....	1000	18 plants	4 ft.	3 ft.	March to Aug.	12 to 14 wks.
Turnip.....	2000	1 pkt.	10 in.	Sow	Sept. to March	10 to 12 wks.

The soil should be Moist enough at time of planting to germinate the seed without irrigation. The depth of planting in heavy soil should be from  $\frac{1}{4}$  in. for very small seed to 1 in. for beans and peas; in sandy soil the seed may be planted from  $\frac{1}{2}$  in. to 2 inches.

In frostless sections the time of planting summer crops may be advanced a full month.

## VEGETABLE CALENDAR FOR FIELD PLANTING

VARIETY	SEED PER ACRE	ROW APART	APART IN ROW	WHEN TO PLANT	TIME TO MATURE	APPROXIMATE YIELD AND VALUE PER ACRE
Artichoke.....	1 lb.	5 ft.	4 ft.	Oct. to Jan.	18 to 20 wks.	
Asparagus—roots.....	11000	4 ft.	1 ft.	Dec. to Feb.	1 year	
Asparagus, seed.....	3 lbs.	2 ft.	Drill	Feb. to March	2 years	
Beans, bush.....	40 lbs.	2 ft.	Drill to 6 in.	March to Aug. 1st	8 to 12 wks.	3 tons \$300
Beans, pole.....	30 lbs.	3 ft.	12 in.	April to July 1st	10 to 12 wks.	4 tons 400
Lima, bush.....	50 lbs.	3 ft.	Drill to 6 in.	April to Aug. 1	10 to 12 wks.	4 tons 400
Lima, pole.....	40 lbs.	3 ft.	12 in.	April to Aug. 1	12 to 14 wks.	4 tons 400
Beets.....	10 lbs.	Double row	Drill	All year	10 to 12 wks.	12 tons 400
Beets, stock.....	7 lbs.	Double row	Drill	Oct. to May 1	14 to 18 wks.	30 tons 200
Carrots, table.....	3 lbs.	Double row	Drill	All year	10 to 12 wks.	12 tons 300
Carrots, stock.....	4 lbs.	16 in.	Drill	Oct. to May 1	12 to 18 wks.	18 tons 200
Cabbage, plants.....	8000	30 in.	18 in.	All year	14 to 16 wks.	12 tons 200
Cabbage, seed.....	5 oz.	8 in.	Drill	All year	20 to 26 wks.	12 tons 200
Cauliflower, plants.....	7000	3 ft.	2 ft.	May to Feb. 1	14 to 16 wks.	
Cauliflower, seed.....	5 oz.	8 in.	Drill	May to Feb. 1	20 to 24 wks.	500 doz. 250
Celery, plants.....	30,000	30 in.	6 in.	March to Aug. 1	16 to 18 wks.	
Celery, seed.....	$\frac{1}{4}$ lb.	8 in.	Drill	March to Aug. 1	24 to 26 wks.	2000 doz. 600
Corn, Sweet.....	10 lbs.	30 in.	18 in.	March to Aug. 1	10 to 12 wks.	400 box 150
Cucumbers.....	2 lbs.	4 ft.	3 ft.	March to Sept. 1	10 to 12 wks.	600 box 200
Chicory—Endive.....	2 lbs.	Double row	Drill and thin to 10 in.	Sept. to Feb. 1	14 to 18 wks.	2000 doz. 600
Eggplant, plants.....	7,000	3 ft.	2 ft.	April to July 1	10 to 12 wks.	
Eggplant, seed.....	$\frac{1}{4}$ lb.	Hot bed	8 in.	Dec. to Feb. 1	18 to 20 wks.	10 tons 600
Kale.....	$\frac{1}{2}$ lb.	3 ft.	Drill	Sept. to March 1	8 to 10 wks.	
Kohl Rabi.....	2 lbs.	Double row	Drill	Sept. to March 1	10 to 12 wks.	12 tons 300
Lettuce.....	2 lbs.	Double row	Drill and thin to 10 in.	All year	12 to 15 wks.	500 crates 500
Musk Melon.....	1 lb.	6 ft.	5 ft.	March to July 1	14 to 18 wks.	400 crates 200
Water Melon.....	1 lb.	9 ft.	8 ft.	March to June 1	16 to 20 wks.	15 tons 150
Casaba.....	1 lb.	8 ft.	8 ft.	March to July 1	16 to 20 wks.	12 tons 300
Onion Seed.....	6 lbs.	3 ft.	18 in.	March to Aug. 1	10 to 12 wks.	400
Onion Sets.....	2 lbs.	Double row	Drill	Sept. to April 1	24 to 28 wks.	200 crates 200
Parsley.....	250 lbs.	Double row	Drill	Dec. to Feb. 1	14 to 18 wks.	
Parsnip.....	4 lbs.	Double row	Drill	Aug. to April 1	12 to 14 wks.	600
Peas.....	5 lbs.	2 ft.	Drill	Aug. to March 1	14 to 18 wks.	400 sks. 200
Pepper, plant.....	9,000	3 ft.	Drill to 6 in.	Sept. to March 1	14 to 20 wks.	4 tons 400
Pepper, seed.....	1¼	Hotbed	18 in. or drill seed in.	April to June 1	10 to 12 wks.	
Potatoes, Irish.....	600 lbs.	3 ft.	field and thin to 18 in.	Jan. to April 1	18 to 20 wks.	10 tons 200
Potatoes, Sweet, plants.....	12,000	3 ft.	1 ft.	Feb. to Sept. 1	10 to 14 wks.	100 sks. 150
Potatoes, Sweet, seed.....	400 lbs.	Hotbed	1 ft.	April to July 1	10 to 12 wks.	
Pumpkin.....	1 lb.	10 ft.	10 ft.	Jan. to Feb. 1	18 to 20 wks.	150 sks. 300
Radish.....	12 lbs.	Double row	Drill	April to July 1	12 to 14 wks.	20 tons 100
Rhubarb, roots.....	5,445	4 ft.	2 ft.	All year	4 to 8 wks.	400
Rhubarb, seed.....	$\frac{1}{2}$ lb.	Double row	Drill	Sept. to April 1	8 to 10 wks.	400
Roselle.....	3 lbs.	5 ft.	3 ft. thin to 1 plant	Jan. to April 1	16 to 20 wks.	
Spinach.....	12 lbs.	Double row	Drill to 6 in.	April to May	18 to 20 wks.	500
Squash, Summer.....	2 lbs.	4 ft.	3 ft.	Oct. to April 1	8 to 12 wks.	6 tons 150
Squash, Winter.....	1 lb.	8 ft.	6 ft.	March to Aug. 1	10 to 12 wks.	300
Salsify.....	6 lbs.	Double row	Drill	April to Aug. 1	12 to 14 wks.	12 ton 200
Tomato Plants.....	1,200	6 ft.	Drill	Sept. to April 1	14 to 18 wks.	8 tons 300
Tomato, seed.....	1 oz.	6 ft.	6 ft.	March to Aug. 1	12 to 14 wks.	10 ton 150
Turnip.....	2 lbs.	Hot bed, Jan.	Out door drill 10 in.	March to June 1	18 to 20 wks.	
		Double row	Drill	All year	10 to 12 wks.	12 tons 200

**A&M**  
*reliable*  
**SEEDS**

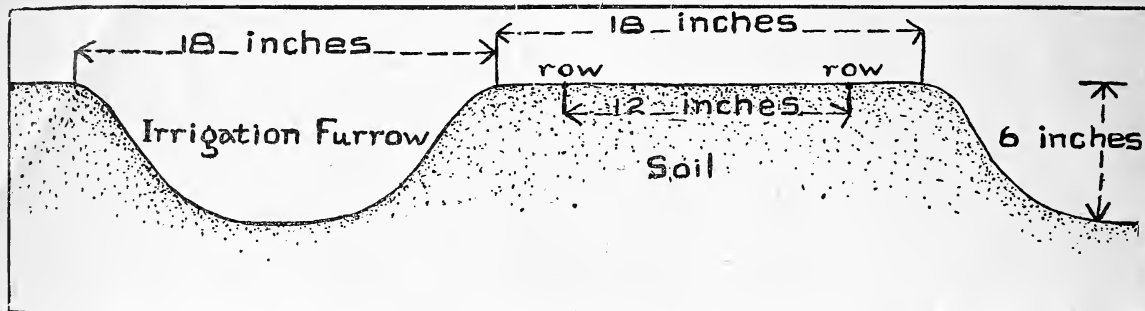
# Aggeler & Musser Seed Co.'s

Vegetable Seeds are the Stand-  
ard Seeds of the Southwest

**A&M**  
*reliable*  
**SEEDS**

The vegetables grown from A. & M. Seeds are the standard vegetables at every market in which they appear. Seed planted out of season or in uncongenial soil means loss to the grower.

How to make Ridges for planting Beets, Chard, Carrots, Kohl Rabi, Lettuce, Onions, Parsley, Parsnips, Radishes, Salsify, Spinach and Turnips. This method is now generally practiced by all market growers who must irrigate. The benefits from planting on ridges are earliness, cleanliness, avoids flooding of vegetables, and insures a more uniform germination. Better results are attained if the rows run north and south, because the sun lights up both sides, no plant is in perpetual shade.



It is through the courtesy of the California Vegetable Union that we present the above illustration which appears in their circular on the culture of Lettuce

Number of Plants to Acre		No. Plants	DISTANCE APART		No. Plants	DISTANCE APART		No. Plants	Average Time Required for Seeds to Sprout	
Set at Regular Distances Apart										
DISTANCE APART	No. Plants									
1 ft. by 6 in.	87,120		5 ft. by 2 ft.	4,356		30 ft. by 30 ft.	48		Bean	5-10 days
2 ft. by 6 in.	43,560		5 ft. by 3 ft.	3,904		33 ft. by 33 ft.	40		Beet	7-10 "
2 ft. by 12 in.	26,780		5 ft. by 4 ft.	2,178		40 ft. by 40 ft.	27		Cabbage	5-10 "
2 ft. by 18 in.	14,520		5 ft. by 5 ft.	1,742		50 ft. by 50 ft.	12		Carrot	12-18 "
2½ ft. by 12 in.	17,420		6 ft. by 3 ft.	2,420		60 ft. by 60 ft.	17		Cauliflower	5-10 "
2½ ft. by 18 in.	11,616		6 ft. by 4 ft.	1,815		66 ft. by 66 ft.	10		Celery	10-20 "
2½ ft. by 2 ft.	8,712		6 ft. by 6 ft.	1,200					Corn	5-8 "
3 ft. by 1 ft.	14,520		7 ft. by 7 ft.	888					Cucumber	6-10 "
3 ft. by 1½ ft.	9,924		8 ft. by 8 ft.	680					Lettuce	6-8 days
3 ft. by 2 ft.	7,260		9 ft. by 9 ft.	537					Onion	7-10 "
3 ft. by 3 ft.	4,840		10 ft. by 10 ft.	435					Pea	6-10 "
4 ft. by 1 ft.	10,890		11 ft. by 11 ft.	360					Parsnip	10-20 "
4 ft. by 2 ft.	5,445		12 ft. by 12 ft.	302					Pepper	9-14 "
4 ft. by 3 ft.	3,630		14 ft. by 14 ft.	222					Radish	3-6 "
4 ft. by 4 ft.	2,722		15 ft. by 15 ft.	193					Tomato	6-12 "
5 ft. by 1 ft.	8,712		16 ft. by 16 ft.	170					Turnip	4-8 "
			17 ft. by 17 ft.	150						
			18 ft. by 18 ft.	134						
			19 ft. by 19 ft.	120						
			20 ft. by 20 ft.	108						
			25 ft. by 25 ft.	69						

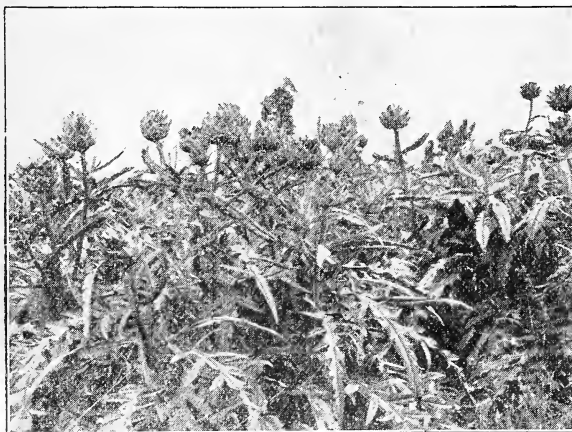
**Rule.**—Multiply the distance in feet between the rows by the distance the plants are apart in the rows, and product will bethe number of square feet for each plant or hill; which divided into the number of square feet (43,560), will give the number of plants to the acre.

Plant radishes with slow growing vegetables to mark the rows for cultivation.

**Rule.**—Multiply the distance in feet between the rows by the distance the plants are apart in the rows, and product will bethe number of square feet for each plant or hill; which divided into the number of square feet (43,560), will give the number of plants to the acre.

Plant radishes with slow growing vegetables to mark the rows for cultivation.

## ARTICHOKE



Green Globe Artichoke

## Green Globe (Half-Moon Bay Type)

**REMARKS:** The early artichoke brings a high price; but Southern California climate does not produce them early enough to get this high price, therefore we do not advise planting more than 1/4 acre for local market.

The best way to get a good artichoke is to secure plants from old stalks of some good strain, as seeds cannot be depended upon to produce any certain variety. One-half dozen is enough for a family garden.

Transplant five feet apart in rows seven feet apart. When the young plants are attacked by aphid spray with "Black Leaf 40". About the time the buds are well advanced the under leaves become a harbor for flies and aphid and ants. When this occurs break off all the under leaves, clear the ground of all rubbish and spray with "Black Leaf 40" and use ant poison. See Insecticide page. You will then have a long season of large, clean buds.

(Pkt. 10c) (oz. \$1.20) (1/4 lb. \$4.00) (lb. \$12.00) postpaid.  
Plants (3 for 60c) (12 for \$2.00) postpaid.

## SUGGESTIONS FOR A CALIFORNIA GARDEN ON A CITY LOT

You have just moved into a new home of your own; you have not much time for gardening, yet you wish to get the most out of the small space. Read in this catalog about the preparation of the soil, then purchase A & M seeds according to the season. Plant seeds properly and with ordinary culture you will be eating radishes within three weeks, followed in succession by green onions, cucumbers, spinach, beans, beets, lettuce, carrots, sweet corn, peppers, and tomatoes. Have a few plants of rhubarb, a bed of asparagus about 10'x10' will afford enough for a small family. Plant spinach and rhubarb in shady places. If you have a city lot, plant a garden; you can grow \$100.00 worth of better vegetables than you can buy.

Read carefully each page of this catalog. You will find the information you need.

# A & M Asparagus

Approximately 500 Carloads of Asparagus, Worth More Than \$500,000 is Shipped Out of California Annually. California Has 17,444 Acres Planted to Asparagus, Five Times as Much as the Next Highest State.

Write U. S. Dept. of Agriculture for Farmers' Bulletin No. 829, "Asparagus."

**REMARKS.** No vegetable is more healthful or more palatable than the tender asparagus that appears on the table very early in the spring.

Every home garden should have a bed about ten by twenty feet, planting about one hundred roots. This would furnish enough tips from day to day to supply the family table.

Set the rows two feet apart instead of four as for field culture, and one foot apart in the row.



A No. 1 Field of Asparagus, Older Than 25 Years

## Culture

Drill the seed thinly in rows fifteen inches apart during March or April. Thin out to two inches apart in order to have strong plants.

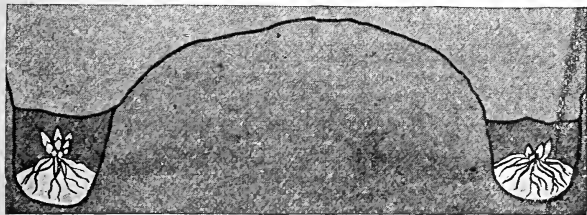
Exercise great care in preparing a field because it will last many years.

Transplant during February setting the roots two feet apart, in furrows six feet apart. Carefully spread out to avoid matting. The furrows should be ten or twelve inches deep and run North and South in order to get the sun on both sides of the rows. Cover the roots about three inches and as the plant grows throw the soil toward the plant. Each year when the berries are red, cut the plants close to the ground and burn, then spray the entire field with Anchor Brand of sulphur, in order to destroy any germs of mildew, red spider or rust that may be there. Keep a mulch over the row with a harrow, but cultivate more deeply between the rows. Use stable manure liberally and hill up a little higher each year. Irrigate freely during the growing period. Three pounds of seed is sufficient to plant an acre.

Growing asparagus offers exceptional opportunity to the ten-acre man who has the right soil near enough to the city to sell at the local market. More than \$1,000 per acre may be realized from March first until June first. It has been reported that as much as \$30,000 has been realized in one season from a ten-acre field.

Use one year old roots; do not cut them back. When planting see that the roots are well spread out so that the soil will touch every part. If this is not done the plant cannot thrive.

**Market:** A large acreage is grown for canneries, and in sections where it can be produced very early it is grown for Eastern markets. It is also very profitable to grow for local market.



Plant Asparagus Roots one foot apart in trenches six feet apart for field culture; only two feet apart for home garden.

**REMARKS:** The green growth above the ground is tender and palatable. The white stem below the surface is tough and unpalatable. Why then is the custom to cut so deep? Would it not be better and a fairer practice to allow the stem to grow a little taller in order that the consumer may get more nearly full measure when he buys a pound of asparagus? To do this would cause no loss to the grower.

When you plant A & M packet seeds you get satisfactory results because they grow the kind of vegetable or flower you expected.

A & M packet seeds will not disappoint you.

## Science in Agriculture

Owing to the rust that was so prevalent throughout the east, destroying asparagus fields until it was not profitable to grow, the growers association in Massachusetts under the direction of D. W. A. Orton of the Department of Agriculture, set about to produce a strain of Asparagus that would prove immune to rust. After 15 years of selection and cross pollination they succeeded in producing the desired results and have named it the Washington asparagus. An improved strain was called Martha Washington, and the succeeding season brought forth an earlier strain which was named Mary Washington.

The seed we offer is grown from pedigreed stock by a professional grower.

**Mary Washington** This is the latest introduction of the rust resistant varieties and the best with the advantage over all other varieties of being earlier which means so much to the grower. Seed is very scarce. Per (Pkt. 25c) (oz. \$2.50) (¼ lb. \$7.50) (lb. \$20.00) postpaid.

The demand last season for roots of the Mary Washington variety was far in excess of the supply so that the price advanced to \$25.00 per 1,000.

In order to meet this demand we have grown approximately one million roots. Per doz. (60c) (100, \$3.00) (1,000, \$15.00)

**Argenteuil** An excellent variety for the canner and early shipper. This variety is now more extensively grown by large planters and shippers because it is more prolific and stands shipping better. Also its purple tinge is attractive, and its excellent flavor puts it on an equal with the Palmetto for table use. (Pkt. 10c) (oz. 20c) (¼ lb. 50c) (lb. \$1.50) postpaid.

**Palmetto** A popular variety for the home garden or for shipping. The sprouts are green and of delicious flavor. (Pkt. 10c) (oz. 20c) (¼ lb. 45c) (lb. \$1.25) postpaid.

Plants (per doz. 50c) (100, \$3.00) postpaid.

## Asparagus Knife

Price 90c; by mail \$1.00.

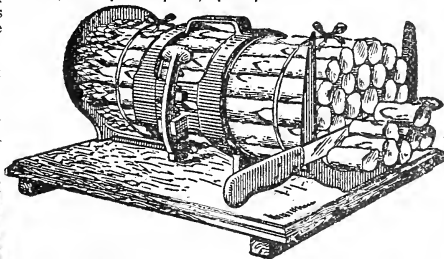
## Asparagus Moss

We always have on hand a large supply of moss for asparagus shippers. Price on application.

## Tapes

### FOR TIEING ASPARAGUS

Spools of 1000 yards, red, white or blue. \$6.75 per Spool, postpaid.

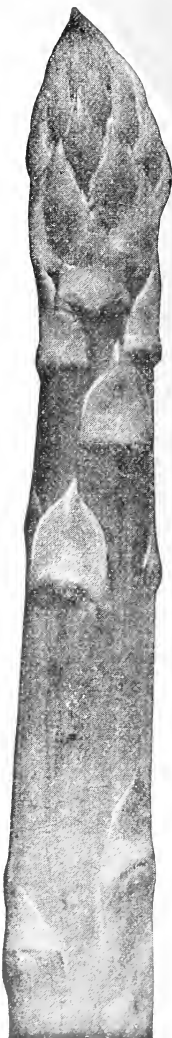


Asparagus Buncher

## Asparagus Buncher

We carry the Philadelphia make, which is the popular one with all large shippers. No. 1 size will shape bunches 3-3½ inches in diameter, weighing about one pound. No. 2 will shape bunches 4-5 inches in diameter, weighing about two pounds. Price—(No. 1, \$2.75) (No. 2, \$3.00) f. o. b. here.

Whether your patch is small or large, it will pay you to get an Asparagus Buncher, either one or two pound. All professional shippers put it up that way because it saves the retailer the trouble of weighing and the constant loss of overweight to each pound; besides, this work may be done at home and not at the busy market.



Mary Washington Asparagus

"I am well pleased with your seeds and information catalog. Thanks to a good reliable seed house to deal with. Yours for success."

MRS. N. A. BAKER, California.

# A & M Beans

All 10 lb. Lots of Beans \$3.00 Postpaid. Write for Quantity Price.

## Read

All orders for large quantities that would be cheaper to send by express or freight, we deliver to the transportation company at Los Angeles. We do not prepay transportation unless sufficient money has been sent for that purpose.

Market gardeners who are beginners and not familiar with gardening in the Southwest would do well to consult us either in person or by mail before buying, as to variety and time of planting. Special attention should be given to the instructions concerning the time of planting, which is an important factor in Southern California, as each month requires a different variety according to the market for which they are grown.



Ventura Wax

All Beans and Peas are hand-picked. This gives the grower more and better seed per pound. When buying get the best.

The hand picking of seed beans is a task of large proportion and it may surprise you to know that we have employed almost throughout the entire year, six or more persons constantly hand-picking beans and peas. The cost of hand picking is never less than one cent per pound and often as much as two cents, according to the amount of waste that is picked out.

The loss to the planter of seed that is not hand-picked is approximately 10 per cent of the crop.

When purchasing beans ask for hand-picked seed.

## Bean Culture for Home Gardens

During the early spring give sandy soil preference, but heavy soil in summer. When the ground is properly moistened and pulverized, plant bush beans one or two seeds every four inches, in rows twenty to twenty-four inches apart. If the soil is heavy, one-half inch is deep enough. Plant deeper in sandy soil. During the cool spring months plant shallow; during the hot summer months plant down to moist earth. Do not plant in soil that is too wet, nor irrigate immediately after planting, else the seed will rot. During the winter months do all irrigating in the morning, because the water from the pipe is warm and will help the growth. When applied in the evening the water chills the plants, cools the soil, retards the growth and causes mildew. During hot summer days irrigate in the late afternoon. Never sprinkle beans.

## ADVICE

Watch for the slightest indication of mildew. When it appears spray with the Anchor Brand of Sulphur. This will not only arrest any further advance of mildew, but it will fertilize the soil and destroy any germs of Fungi that may be there. For application use the Nico duster.

Sulphur will not cure, but will arrest and prevent mildew.

Market gardeners should read carefully the description of each variety.

Anyone having light, sandy soil that needs enriching, should plant it to beans, inoculating the seed with nitrogen culture.

## It is not generally known that—

When your bush varieties of string beans have borne a crop don't pull them up but as soon as you have finished the last picking, cut the bush off about six inches above the ground. A new growth will appear and in a remarkably short time bear another crop of beans. The same is true of Fordhook Limas.

The following list comprises all the varieties best suited to general gardening. We have ceased to catalog others that would only mislead the gardener.

Write for quantity prices on all beans.

## FLAT YELLOW POD VARIETIES

**Ventura Wonder Wax** Nearly all agree that this is a wonder indeed. Long flat pod, very prolific; bears early, and continues nearly all summer; planted in September, if not too cold, bears until January, being rust proof. This bean was introduced by us in 1900, and has been the market gardener's favorite since that time. Plant from February to October. (Pkt. 10c) (½ lb. 20c) (lb. 35c) (10 lbs. \$3.00) prepaid. Write for quantity price, as prices fluctuate.

### Rust Proof

"In a field of Ventura Wonder, were some Navys mixed here and there. The Navys were destroyed with rust but the Venturas were unaffected."

**A & M Golden Wax** Long, flat pod, rich golden yellow stringless. This variety is so superior to other strains of Golden Wax that we have discarded all but this. Plant early in April and until August. (Pkt. 10c) (½ lb. 20c) (lb. 35c) (10 lbs. \$3.00) prepaid.

**Davis Kidney Wax** Good bearer; pods are long, rustless and hardy; very tender when young. (Pkt. 10c) (½ lb. 20c) (lb. 35c) (10 lbs. \$3.00) prepaid.

This is the best Garden Bean for the interior, Imperial Valley, Arizona and New Mexico, because the blossoms will not fall even at a temperature of 110 degrees, when most other varieties fail, the Davis will yield a big crop. It is an excellent dry bean.

## FLAT GREEN POD VARIETIES

**Canadian Wonder** Flat pod of good flavor, not stringless, but otherwise tender. Very hardy. Desired above all others by gardeners growing on the foothills for winter shipping, because of its luxuriant growth and continuous bearing of long, straight pods. Plant in September, October, November, December and January, according to your locality. (Per pkt. 10c) (½ lb. 20c) (lb. 35c) (10 lbs. \$3.00) prepaid.

**Dwarf Horticultural** Desirable for green, shell and excellent flavor. It is of Italian origin and is very popular with the Italian population. (Pkt. 10c) (½ lb. 20c) (lb. 35c) (10 lbs. \$3.00) prepaid.

**Six Weeks** A strong, rapid grower, which matures quickly. Flat pod. Only desirable for forcing. Plant in February and March, also early in September and October. (Pkt. 10c) (½ lb. 20c) (lb. 35c) (10 lbs. \$3.00) prepaid.

**French Mohawk** Long oval pod, very tender and prolific. Matures in six weeks. Desirable for a profitable short crop, as only two months is required from seed time to the end of the crop. Plant every month from March to October. (Per pkt. 10c) (½ lb. 20c) (lb. 35c) (10 lbs. \$3.00) prepaid.

## ROUND YELLOW POD VARIETIES

**Refugee Wax** This is a favorite because of its hardy growth and enormous yield of tender, round stringless pods of excellent flavor. Plant from April until September. (Per Pkt. 10c) (½ lb. 20c) (lb. 35c) (10 lbs. \$3.00) prepaid.

**Prolific Black Wax** Pod round straight, five to six inches long. Decidedly the most desirable for mid-summer gardening. Plant from April to August. (Pkt. 10c) (½ lb. 20c) (lb. 35c) (10 lbs. \$3.00) prepaid.

**Hodson Wax** Probably the most prolific of all Wax Beans. The bush grows to large size and the blossoms set well throughout the season, even in extreme heat of summer. Pods are creamy yellow, very tender and stringless. (Pkt. 10c) (½ lb. 20c) (lb. 40c) (10 lbs. \$3.00) prepaid.

**Improved Butter Wax** Very early and prolific. Pods are long, straight, and of uniform size. Absolutely stringless, is resistant to rust and mildew. This is the beautiful yellow bean that attracted the attention of gardeners at the market early last spring. (Pkt. 10c) (½ lb. 25c) (lb. 40c) (10 lbs. \$3.00) prepaid.

**Unrivald Wax** Very early, pods are light yellow and stringless. The plant is resistant to mildew and rust. (Pkt. 10c) (½ lb. 25c) (lb. 40c) (10 lbs. \$3.00) prepaid.

## BUSH BEANS—Continued



Stringless Greenpod

## ROUND GREEN POD VARIETIES

**Stringless Green Pod** One of the best varieties for the first early spring planting. It is very prolific and tender, a great favorite with market gardeners, for a quick maturing crop. Plant from April 1st until Aug. 1st. (Pkt. 10c) (½ lb. 20c) (lb. 40c) (10 lbs. \$3.50) prepaid.

**Refugee or 1000 to 1** An all around favorite for the summer months. Round pod, medium size, tender, desirable for table and cannery. It is a favorite with the market gardener because it is a good shipper, a good seller, and very prolific. Plant from April to August.....(Pkt. 10c) (½ lb. 20c) (lb. 35c) (10 lbs. \$3.00) prepaid.

**Extra Early Refugee** Pods round, light green, extra fine and is very prolific. Mature very early which is a great advantage to one who grows for market. (Pkt. 10c) (½ lb. 20c) (lb. 35c) (10 lbs. \$3.00) prepaid.

## POLE BEANS

### Celestial or Yard Long

A good table bean as well as a curiosity. It is very prolific and a rank grower. Should have ample arbor to climb upon. It should be grown more extensively in the home garden. It is of Chinese origin and one of the best vegetables emanating from that source. It is also absolutely rust-proof. (Pkt. 10c) (1 oz. 20c) (1 lb. \$1.50) postpaid.

**The Scarlet Runner** An old-time favorite that heretofore has been planted chiefly for ornamental purposes. But few people know that the Scarlet Runner may be planted May 1st and in six weeks attain a height of eight feet, and rapidly cover an arbor with vines twenty feet long.

The Scarlet Runner planted May 1st will bear edible pods from July 1st until late fall. When the vines mildew trim them back to within a foot of the ground. The roots will survive the winter, and by the following May will have the arbor again covered and bear green beans until August, when the vines again mildew. Cut back as before and with proper irrigation they will bear another crop in October, and so on, two crops a year indefinitely.

Be sure to build a permanent arbor, and plant some Scarlet Runner during April. (Pkt. 10c) (½ lb. 20c) (lb. 35c) (10 lbs. \$3.00) prepaid.

**RECIPE**—Pick when pods are quite green, cut lengthwise into slices and cook as string beans. They are very tender, stringless and have a delicious flavor quite distinct from other beans.

**Lazy Wife** One of the best pole beans for snaps. The large, fleshy pods are five to six inches long and entirely stringless when young, have a rich buttery flavor. When nearly matured they are delicious when shelled and cooked while yet green. The dry beans, too, are unsurpassed by any. The seed is white, nearly round, and somewhat bigger than a pea. (Pkt. 10c) (½ lb. 20c) (lb. 35c) (10 lbs. \$3.00) prepaid.

**A Word About Pole Beans** Many growers hesitate to plant pole beans because of the scarcity of poles. This objection is easily overcome, and the greater profit in growing the pole varieties should be sufficient reason for going to a little extra care.

Plaster laths will answer the purpose and cost very little.

## White Seeded Kentucky Wonder

This popular Bean was first introduced by us in 1909. Because of its resemblance to the well-known Kentucky Wonder but having white seed, we named it the White Seeded Kentucky Wonder. It proved to be all that we had claimed for it, so that it is now the most popular green Bean on the market. It is preferred by the shippers because of its solid pods, and by the canners for the same reason. The grower prefers it because it is a good seller and a money-maker.

This variety of the many pole beans may truly be termed the All-Round Money-Maker. It is as hardy and rust resistant as the Canadian Wonder. In the South where earliness and lateness mean so much to the market gardener, the White Seeded Kentucky Wonder is far ahead of other varieties. It is enormously prolific of firm pods that withstand shipping to almost any part of the United States. It matures ten days earlier than the Brown Seeded Kentucky Wonder.

This variety is now being offered as a rust-proof pole bean. It is more rust-resistant than other varieties.

The seed is pure white, and on that account is a profitable commercial bean. It is the best bean for the gardener, the shipper and canner. (Pkt. 10c) (½ lb. 20c) (lb. 40c) (10 lbs. \$3.50) prepaid.

**Kentucky Wonder** The Kentucky Wonder was for many years the most popular bean with market gardeners as well as for the home gardeners. Its long round stringless pods are very prolific and tender. Its only drawback was the fact that it is much more susceptible to mildew than other varieties. For April and May planting it cannot be excelled. It has brown seed of little value as dry beans. (Pkt. 10c) (½ lb. 20c) (lb. 35c) (10 lbs. \$3.00) prepaid.

**MRS. NEILSON, Burbank.**

I purchased of you fifteen cents worth of Kentucky Wonder Beans and planted 4 rows 60 feet long. I gathered 380 pounds of green beans. They were trellised with 4 ft. lath.

**Kentucky Wonder Wax** The Pride of the Garden. Its popularity as a home garden bean soon reached nationwide proportions, and today is offered by nearly every seedsmen in the United States. It commences to bear when scarcely higher than the average bush variety, and keeps on producing until killed by a frost. It is a rampant grower, one plant filling a pole with a mass of vines densely loaded with luscious golden beans. They are firm, entirely stringless, and when cooked, deliciously rich and buttery. The seed is brown, closely resembling that of the Kentucky Wonder. Plant from April to August. (Pkt. 10c) (½ lb. 20c) (lb. 35c) (10 lbs. \$3.00) prepaid.

## Superior Kentucky Wonder

We have been growing this bean on our trial grounds for two years, and are now convinced it is superior to any of the other Kentucky Wonder types offered by us for the home garden.

The large size pods fill perfectly and in the "snap" stage are deep green color, meaty, stringless and of a delicious flavor. Vines continue to bear immense quantities throughout the season if kept picked closely. When allowed to ripen the shell beans of pure white color are most excellent for winter use. It is a pole snap bean that no home garden should be without. It's the one pole bean for any garden, and you will never regret planting it. It will prove a prize winner in any contest. (Pkt. 10c) (½ lb. 20c) (lb. 35c) (10 lbs. \$3.00) postpaid.

**Italy's Favorite** An all around good bean for the family garden. A stringless green pod of excellent flavor; a good green shelled bean, good for succotash, for canning and none better for cooking. It is an all around good commercial bean. (Pkt. 10c) (½ lb. 25c) (lb. 40c) (10 lbs. \$2.75) f. o. b. here.

**Horticultural Pole** Also referred to as Romaine, Cranberry, Italian and Cornfield. Its large succulent tender pods make it a desirable bean for the table. It is one of the most desirable green shelled beans for succotash and excellent as a dry bean. It is also excellent when parboiled and pickled in a mild solution of vinegar and water. (Pkt. 10c) (½ lb. 20c) (lb. 35c) (10 lbs. \$3.00) prepaid.

**White Creaseback** This variety is especially valuable for its extreme earliness, and its habit of perfecting all its pods at the same time. Vines small but vigorous, and, in good soil, wonderfully productive, bearing pods in clusters from four to twelve. Pods medium length, silvery green, of the best quality as snaps and stand shipping better than most sorts. The seed is small, oval, very white and hard. It is an excellent bean to cook dry or to sell on the open market as the small white bean. (Pkt. 10c) (½ lb. 20c) (lb. 35c) (10 lbs. \$3.00) prepaid.

Your seed catalog has been a great help to us in understanding California gardening—coming from New Jersey of course, we had to unlearn eastern methods and we have had good success in following instructions in your catalog. Mr. Wickson's "California Vegetables" purchased from you has been an immense help to us.—Mrs. G. A. LOUGH, El Cajon, California.

## Monstrous Lima

There is nothing more profitable in a city garden than a dozen stalks of this wonderful bean. It is a common occurrence for our city customers to tell us of its great productiveness and excellent flavor.

The grower picked one and one-half barley sacks of green beans from one vine at one picking.

Two crops a year for many years. Originated in Orange County, Cal. Introduced by us in 1907.

In addition to this we have numerous testimonials to the effect that we have not exaggerated when we claim this to be the largest, most prolific, most profitable and best flavored Lima bean now in existence. Like every other vegetable, it must have proper culture. Plant 6 feet by 6 feet, leaving one stalk in each hill. If convenient, plant in a sheltered place about April 1st. You will then be gathering beans during September and possibly until January. After a while new growth will appear, then prune as you would a grape vine, and by May 1st you have a new crop as profitable as peppers or string beans or any other early vegetable. During July the vines will show age and become mildewed; prune as before and in October you will begin gathering your third crop. Continue pruning twice a year; irrigate and fertilize. (Pkt. 15c) (½ lb. 35c) (lb. 60c prepaid) (10 lbs. \$5.50 prepaid).

## Pole Lima Beans

In California the 1920 Crop of Beans was 180,000 Acres, Valued at \$19,500,000.

**Pole Lima** Pole varieties of Limas are far more profitable to grow than the bush varieties; what they lack in earliness they make up in continuous bearing. They should be planted from April 1st until September 1st.

**King of the Garden** Very prolific; large and desirable both for the home garden and for the market gardener. (Per pkt. 10c) (½ lb. 20c) (lb. 35c) 10 lbs. \$3.00) prepaid.

**Early Leviathan** We recommend this variety to be planted where it may have a trellis to climb upon. It is the earliest lima for the home garden. It is very productive. The pods grow in clusters. (Pkt. 10c) (½ lb. 20c) (lb. 35c) (10 lbs. \$3.00) prepaid.

## Bush Lima Beans

**Fordhook Bush Lima** In order to get the best results, plant one foot apart in rows 3½ feet apart. It is an improvement over the well known bush Lima because it is more prolific. It is a strong grower, more resistant to blight, and is more profitable to grow for the market because the pods remain green. This is of great advantage to the peddler, retailer and shipper. It has received universal praise. We recommend it to our customers for both home and market gardens—for the home garden because of its excellent flavor and productiveness; for the market gardener because it is demanded by the shipper and consumer. (Pkt. 10c) (½ lb. 20c) (lb. 40c) (10 lbs. \$3.50) prepaid.

**Improved Bush Lima** This bean differs from the old bush variety in being ten days earlier. Will yield one-fourth more tonnage per acre. The pods contain four to five beans that are larger and thicker than the old bush lima. Where the Improved Bush Lima is known the old variety is no longer in demand. (Pkt. 10c) (½ lb. 20c) (lb. 35c) (10 lbs. \$3.00) prepaid.

**Henderson's Bush** Also called Baby Lima. Small white Lima Bean, of excellent flavor and enormously prolific. It is grown so extensively here that it ranks commercially with common limas and other commercial varieties. It is used largely for canning. (Pkt. 10c) (½ lb. 20c) (lb. 35c) (10 lbs. \$3.00) prepaid. Ask for quantity price.

**Burpee's Bush Lima** This bean has become very popular with the market gardener in all irrigation districts because it is earlier and more easily grown. There are no vines in the way when irrigating and cultivating. It is enormously prolific and keeps bearing a long time. (Pkt. 10c) (½ lb. 20c) (lb. 35c) (10 lbs. \$3.00) prepaid. Write for quantity price.

# Commercial Beans

**Bean Culture** Write United States Department of Agriculture, Washington, D. C., for Farmer's Bulletin No. 907. It contains some practical illustrations. They will be sent free.



Reading from left to right:—Broad Windsor, Lewis Lima, Red Kidney, Pinto, Pink, Garvanza, Blackeye, Mexican Red, Lady Washington, Navy, Tepary, Lentil.

Be sure to consult us when in the market for these varieties.

If only one pound is desired, send 25c to cover packing and postage. For larger quantities, ask for the prevailing prices.

**Lentil** A small lens-shaped pea having a flavor peculiar to itself that is liked very much by many people. The vine resembles that of the vetch and it should be cultivated in about the same way and in the same season.

**Garvanza—(Chick Pea)** This is very popular farther south where it grows to perfection and where the demand for it is very great.

**Pink** An old time favorite because it is very prolific, has a good flavor and is one of the best sellers. It is always listed in the market quotations.

**Red Kidney** Like the Pink and Navy beans it is sold everywhere and commands a higher price because of its better flavor. It is grown largely for canning.

**Mexican Red** There is a ready market for it at our wholesale grocers, who supply the great southwest territory with groceries.

**The Lewis Lima** This common lima is grown so largely in California that it easily exceeds in acreage of all the other varieties combined. There are many strains of the common limas, but the Lewis is conceded to be the best.

**Lady Washington and Navy** These two varieties go hand in hand. Both are small white beans, but the Navy is slightly smaller and is often distinguished by being called the Small White, while the Lady Washington is called the Large White. The Navy is more resistant to mildew.

An application of two sacks of Toro Sulphur and 1,000 pounds of lime per acre will greatly reduce your losses from mildew, nematode, and wire worm and will greatly increase your yield. Give it a fair trial.

**The Blackeye** This bean is always profitable to the grower because it yields 1500 to 2500 pounds per acre without irrigation, and on almost any kind of soil. It is a good cover crop and soil renovator. The beans find ready market at a fair price. Rabbits will not eat the Blackeye.

The Blackeye is in a class by itself, and the price is not governed by the market for other beans. Indeed the price has proven to be the reverse. When commercial beans are low the Blackeye commands a higher price. It is safe to plant Blackeyes because you always get a crop, and you never fail to sell at a fair price.

If your soil needs humus, plant Blackeye.

**Soy Beans** See cover crops. Aside from the value of the soy bean as a cover crop its economic value for oil and the oil cake for poultry food amounts to millions of dollars. Its culture in the eastern states is enormous. Maybe our ranchers are overlooking a profitable crop.

Our mills are here to crush them and we have the market for the oil and poultry food.

The soy bean is a very easy crop to grow. Should you be interested, write the Dept. of Agriculture, Washington, D. C., and ask for Bulletin No. 439, subject, "The Soy Bean."

**Broad Windsor** It is one of the best nitrogen gathering legumes, and on this account every garden should have a plot of these beans.

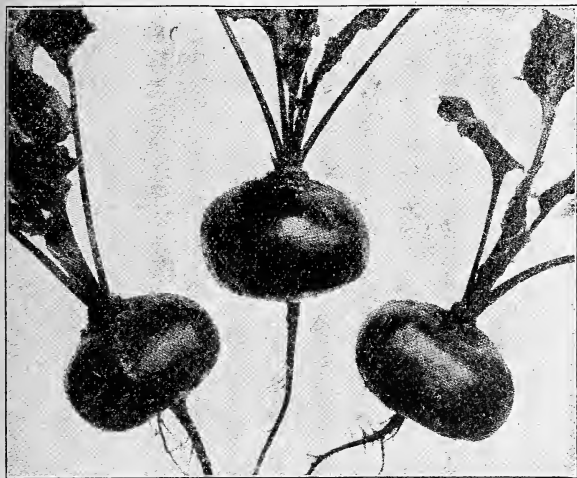
We are indebted to Mr. John House for the suggestion that when grown in the home garden, the tops should be pinched off. The beans will become more fully developed.

See cover crops. Write University of Calif., Berkeley, for Circular No. 257, subject, "The Small-seeded Horse Bean."

## A & M Table Beets

**MARKET:**—Besides the everyday demand at the local market places, there is the seasonable demand from outside points and for this purpose planting should range from August 1st until January 1st. See the shipper for further information. The canneries too use a large acreage. If you are conveniently located you will be fortunate to secure a contract with one of them.

**Culture** Beets may be planted all the year round where the temperature does not linger below 30 degrees. Sow the seed one inch deep in well prepared, moist soil in rows eight or ten inches apart, or on ridges same as lettuce. Drill eight pounds of seed per acre. Thin out to one plant every three inches, and transplant the discarded plants in any convenient spot about the garden. The Egyptian is a small, dark red, flat, smooth variety. It is sweetest and best for the table. Irrigate about every two weeks, unless the nature of the soil is such that more frequent irrigation is found to be necessary. Mulch the soil after each irrigation. Beets are ready for use in ten weeks and continue in prime condition for another ten weeks. One ounce of seed for 100 feet of row.



Early Flat Egyptian

**Early Flat Egyptian** The market gardener's winter favorite on account of its beautiful appearance, earliness, and excellent flavor. (Pkt. 10c) (oz. 15c) (¼ lb. 35c) (lb. \$1.00) postpaid.

**Early Blood Turnip** Of large growth. Flesh very tender and retains its blood-red color when cooked. On account of its tall leaves it is a favorite summer time beet with market gardeners. (Pkt. 10c) (oz. 15c) (¼ lb. 35c) (lb. \$1.00) postpaid.

**Crimson Globe** This splendid variety has now been grown quite extensively in many sections of the country and the many good reports received from old customers indicate that it gives most thorough satisfaction. It is of medium size, generally about three inches in diameter, very handsome in shape, with a remarkably smooth surface. It has a very small tap-root. Gardeners prefer it for summer planting because the large foliage protects the beet. (Pkt. 10c) (oz. 20c) (¼ lb. 45c) (½ lb. 65c) (lb. \$1.25) postpaid.

**Early Crosby** A long time favorite for the family garden. (Pkt. 10c) (oz. 15c) (¼ lb. 35c) (lb. \$1.00) postpaid.

**Detroit Dark Red** This is an ideal beet for all purposes. It cannot be excelled for the table; free from all fibre and very sweet. It is the best of all for pickling or canning. Even the tops are good when pickled. (Pkt. 10c) (oz. 15c) (¼ lb. 35c) (lb. \$1.00) postpaid.

When beet tops are young and tender they may be cooked as spinach and are as good. The stems may be par-boiled and pickled for immediate use.

### It is not generally known that—

Beet seed may be planted freely in the row and when six to eight inches high it may be thinned to one plant for every three inches, and the plants pulled cut may be cooked and eaten as spinach.

Swiss Chard may be thinned and eaten in the same way, but the Chard should be thinned to one plant to ten inches. As it grows large the leaves may be broken off at the base of the stem, the foliage cooked as spinach and the stems as asparagus. Both are very palatable.

## A & M Stock Beets

Since the coming of the silo, the planting of beets for stock has fallen down until now only a very small acreage is planted. The silo provides the succulent food necessary to feed with dry forage. The growing of corn for the silo is much more economical, but to the breeder of hogs, small stock and poultry, we recommend the planting of beets. The Stock Beet is one of the finest fat and milk-producing crops we have today, and when fed in conjunction with grain they are worth nearly as much, pound for pound, as the grain itself.

If larger quantities are desired, do not fail to write for special prices, as all field seeds are subject to market fluctuations.

**Culture**—May be sown all the year round in drills sixteen inches apart. Thin out to stand six inches apart in rows. Keep well cultivated; 8 pounds of mangels, or 10 pounds of sugar beet seed will plant an acre and yield 20 tons or more of beets.

### Half Sugar Rose

A distinct type of Sugar Beet, producing not only a good crop, but roots of giant size and richest food quality. It has yielded 55 tons per acre, several tons per acre more than the heaviest producers of other sorts on the list. They have a small top, and are easily trimmed. The roots are heavy, but are so easily harvested that they may be uprooted by a push of the foot. The flesh is white, solid, tender and very sweet and imparts a rich, pleasant flavor to dairy products when fed to milch cows. Also particularly good for fattening hogs. Half Sugar Rose is a profitable Stock Beet to grow. (Pkt. 10c) (lb. 60c) (10 lbs. \$6.00 postpaid).



Long Red

### Long Red Mangel

The largest Stock Beet. Yields 40 to 50 tons to the acre. Will grow in land containing more alkali than any other beet. All stock except hogs eat it readily. (Pkt. 10c) (lb. 60c) (10 lbs. \$6.00) postpaid.

### Golden Tankard Mangel

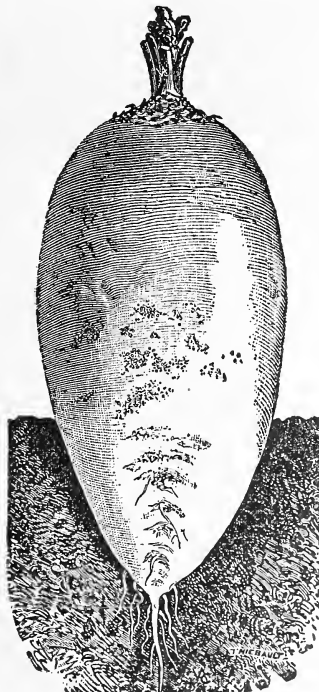
Contains more sugar and less water than any other Mangel. Rich in milk-producing qualities, hence a favorite with dairymen. Horses will eat it (Pkt. 10c) (lb. 60c) (10 lbs. \$6.00 postpaid).

### Klein Wanzleben

(Sugar Beet). This variety is without question the best in cultivation. Not the largest in size, but the richest in saccharine. It will fatten hogs as quickly as grain. (Pkt. 10c) (lb. 60c) (10 lbs. \$6.00 postpaid).

### Sludstrup

This variety is more extensively grown in Holland by dairymen than any other. Its uniform growth of large, well-shaped beets rich in saccharine. Its record for producing rich milk and sweet butter, has made



Half Sugar Rose

it the popular beet of that country. We are always on the lookout for something better to offer our trade. We are sure you will add dollars to your dairy by planting the Sludstrup. (Pkt. 10c) (lb. 60c) (10 lbs. \$6.00 postpaid).

The Nematode thrives in beet fields, causing much loss to the grower. Toro Sulphur and lime promises relief. Try it.

## A & M SWISS CHARD

Culture—Same as for beets; transplant 8 inches apart in rows 18 inches apart.

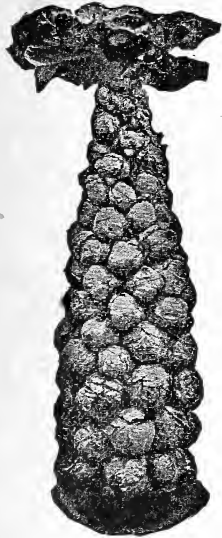
Grown for its leaves only; one of the best early greens. Cook the leaves as you do spinach and the stems in cream as asparagus. Leaves grow to enormous size, 20 inches to 2 feet in length. The plant is almost perpetual if kept trimmed, but it is better to have a new crop every year. The tender leaves make it a desirable plant for poultry greens; much more desirable than alfalfa, because it can be grown with less care and in any convenient place about the premises. Try it for your hens.



White Swiss Chard

**Lucullus** (Pkt. 10c) (oz. 15c) (¼ lb. 35c) (lb. \$1.00) postpaid.

**White Swiss** (Pkt. 10c) (oz. 15c) (¼ lb. 35c) (lb. \$1.00) postpaid.



## BRUSSELS SPROUTS

Culture—Same as Cabbage.

**Market.**—The demand for Brussels Sprouts is probably in excess of the supply, but the cost of production is so high that it must be classed as a luxury. We recommend it highly for the home garden.

One oz. of seed will produce about 5,000 plants.

For Aphis Spray with "Black Leaf 40."

This excellent vegetable, considered the most delicious of all the cabbage family, is finding increased demand in the public markets, and should be grown more largely. It is a long season grower and ranks as to time with our late varieties of cauliflower. Therefore, seed should be planted for succession from July 1st until Nov. 1st.

The increasing demand has spurred us on to look for something better than has hitherto been offered on this market. We have succeeded in securing a medium dwarf variety that bears larger heads, and every joint a head. (Pkt. 10c) (oz. 40c) (¼ lb. \$1.35) (lb. \$4.00 postpaid).

**RECIPE.**—Boil the same as cabbage, when done drain off the water, butter and season to suit.

Brussels Sprouts

## BROCCOLI

A Hardy Strain of Cauliflower

The acreage planted to Broccoli is being enlarged each year; growers find that it endures lower temperatures and more adverse conditions than Cauliflower. It is slow to mature, therefore the seed should be planted during July for an April harvest.

The fact that many growers are securing a satisfactory profit should encourage the planting of large acreage.

**St. Valentine** Culture same as for Cauliflower. Broccoli matures 4 to 6 weeks later than Cauliflower which it so much resembles that it is difficult to distinguish the difference. However the foliage is a darker green, and spreads more than does that of the pearl cauliflower.

The St. Valentine variety is grown quite extensively in certain sections of Oregon and in recent years has proven profitable to grow in southern California where there is an increased acreage each year. (Pkt. 15c) (oz. (\$2.00) (¼ lb. \$6.00) (lb. \$20.00) postpaid.

**Purple Cape** (Pkt. 10c) (oz. 90c) (¼ lb. \$3.00) (lb. \$9.00) postpaid.

**Snowy White** (Pkt. 10c) (oz. 90c) (¼ lb. \$3.00) (lb. \$9.00) postpaid.

## A & M CHINESE CABBAGE

Culture—Grow it as you do lettuce; transplant 10 inches apart in rows 12 inches apart. Plant from Sept. 1 until Feb. 1.

Boiled with beef or pork it is excellent, having a much more pleasing flavor than cabbage. The inner leaves make better cold slaw. (Pkt. 10c) (oz. 50c) (¼ lb. \$1.65) (½ lb. \$2.50) (lb. \$5.00 postpaid).

Our seed is imported from China. It is the genuine article as pictured here and cannot be compared with the Pe-Tsai seed grown in Europe.



Chinese Cabbage

## Agricultural Books

	Price	Pstpd.
Cabbage and Cauliflower, by Allen .....	\$ .75	\$ .85
California Fruit and How to Grow It, by Wickson .....	4.00	4.15
California Vegetables, by Wickson .....	2.50	2.70
California Garden Flowers, Shrubs, Trees and Vines .....	2.00	2.20
Second 1000 Questions in California Agriculture Answered by Wickson .....	1.50	1.70
Campbell's Soil Culture Manual, 350 pages .....	2.50	2.75
Campbell's Soil Culture Primer, 100 pages .....	.50	.60
Celery Culture, by Beattie .....	.75	.85
The Corn Crop, by E. G. Montgomery .....	.....	2.25
Farm Grasses of the United States, by Spillman .....	1.60	1.75
Forage Crops Other Than Grasses, by Shaw .....	1.60	1.75
Ginseng, Kain's Book on .....	.75	.85
Grasses and How to Grow Them .....	2.00	2.10
Insects and Insecticides, by Weed .....	1.60	1.75
Irrigation for the Farm, Garden and Orchard, by Stewart .....	1.50	1.70
Mushroom Culture, by American Spawn Co. ....	.35	.40
New Onion Culture, by Grenier .....	.75	.85
Peanut Culture .....	.75	.85
Potatoes, by Frazier .....	1.00	1.15
Pruning Manual, by Bailey .....	2.00	2.20
Roeding's Fruit Grower's Guide .....	1.50	1.65
Soils and Fertilizers (Illustrated), by Lyon .....	1.50	1.65
Spraying Crops, by Weed .....	.75	.85
Strawberry Culture, by A. S. Fuller .....	.40	.50
Sweet Potato Culture, by Fitz .....	.75	.85
Talks on Manures, O. by J. Harris .....	1.75	1.90
Tomato Culture, by Tracy .....	.75	.85

Look over the list of Agricultural books and send for the one that may aid you in your particular line.

## LITERATURE FOR POULTRYMEN

	Price	Pstpd.
American Standard of Perfection .....	\$2.50	\$2.70
Artificial Incubation and Brooding .....	1.00	1.15
Barred White, Buff, Plymouth Rocks .....	1.00	1.15
Bantam Fowl .....	.50	.60
Broilers and Squabs .....	.60	.70
California Poultry Practice, by Mrs. Susan Swaysgood .....	1.00	1.20
Call of the Hen, by Walter Hogan .....	2.00	2.25
Canary Breeding and Training .....	.35	.45
Chick Book .....	.50	.60
Diseases of Poultry .....	1.00	1.25
Eggs and Egg Farm, by Stoddard .....	.65	.70
Guinea, Pigs .....	1.50	1.70
High Egg Production .....	2.00	2.25
Hog Book by W. S. Guilford .....	2.00	2.25
Leghorns, Brown, White and Buff .....	1.00	1.15
National Standard Squab Book .....	1.00	1.15
Plymouth Rocks, The .....	1.00	1.10
Profitable Culling and Selective Flock Breeding, compiled by Jackson & Curtis .....	1.50	1.70
Poultry Houses and Fixtures .....	1.00	1.15
Poultry Account Book, Gilt Edge .....	.40	.50
Poultry Culture .....	1.50	1.70
Practical Poultry Keeping, by Wright .....	2.00	2.20
500 Questions and Answers, by J. W. Darrow .....	.25	.30
Rabbits, Fur Bearing, by Ritchey .....	.50	.60
Rabbit Pedigree Blanks, per dozen .....	.25	.35
Rhode Island Reds .....	1.00	1.10
Successful Poultry Keeping .....	1.00	1.05
The New Egg Farm, by H. H. Stoddard .....	1.50	1.70
Turkeys, How to Grow Them, by Herbert Myrick .....	1.50	1.60
Two Hundred Eggs a Year per Hen .....	.50	.60
Use of Artificial Light to Increase Winter Egg Production .....	1.50	1.70
Wyandottes, The .....	1.00	1.10

# A & M Cabbage

Cabbage may be grown all the year in Southern California and throughout the Southwest.

It should be borne in mind that the big planting of cabbage is intended to meet the Eastern demand in midwinter and early spring, and that our time of planting is out of the natural season, and therefore often subjected to unseasonable weather, which causes it to be stunted and often shoot to seed. The wonder is that any of it matures.

Improper culture, too, will stunt the normal growth of cabbage and cause the heads to prematurely go to seed.

Cabbage requires heavy soil but good drainage and frequent but shallow cultivation.

Culture—The secret of growing hardy plants is to thoroughly prepare the soil in the plant bed. Plow the soil to a depth of eight or ten inches, pulverize well. Sow in drills not too freely, about one-half inch deep, press the soil firmly over the seed; this is important. In about six weeks transplant in rows three feet apart, one foot in the row for Winnigstadt, eighteen inches for large-heading varieties. Keep the crop well watered and cultivated for when the growth is checked the seed head matures and bursts forth as soon as moisture is again applied. This accounts for much cabbage going to seed. Early varieties mature about three and one-

half months after transplanting, late varieties in about five months.

Should there be a cold spell when the thermometer lingers below 25 degrees, just at the time the cabbage begins to head, you may expect twenty-five per cent of your crop to shoot to seed.

One large and constant grower says: "November transplanting escapes the hard winter season that causes so much loss by shooting to flower."

**For Cabbagae Worms**—We do not hesitate to recommend Paris Green to be used up to two weeks before marketing the cabbage because the spray only reaches the outer leaves that are not eaten, and because within two weeks the elements neutralize the poison. Also when only one tablespoonful of Paris Green is mixed with four gallons of water and kept well agitated there could not possibly be poison enough on a head of cabbage to even make any one sick. Add 1 cupful of flour paste to make it adhere.

**For Aphis**—Apply Nico Dust.

**Marketing**—The every day demand at the local market should be met with the most palatable varieties like the A & M Early Drumhead, Copenhagen Market and Glory of Enkhuizen.

## A & M Scott's Cross



Scott's Cross

This is one of the most desirable varieties for the local market as well as for shipping. It is a money maker for the grower because it is a sure header and of uniform shape. (Pkt. 10c) (Oz. 40c) (¼ lb. \$1.35) (lb. \$4.00).



## Winnigstadt

No other vegetable listed in our catalog has retained its popularity so continuously and for such a long time as our strain of Winnigstadt Cabbage, introduced by us in 1896. It is now, and has been ever since that date, the most popular cabbage grown in Southern California. It is popular because it is early, solid, good flavor, sure header, and good shipper. (Pkt. 10c) (oz. 35c) (¼ lb. \$1.20) (lb. \$3.50 postpaid).

Winnigstadt Cabbage is worth \$1,000,000 annually.

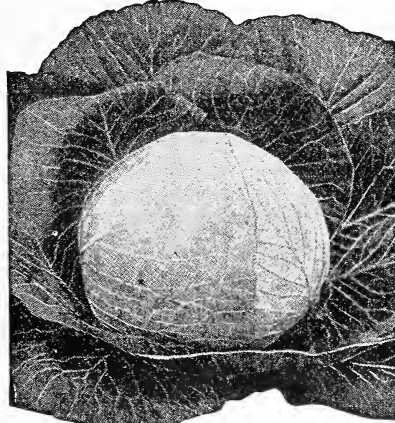
**Early Flat Dutch** This is a favorite for the home garden because of its earliness and its excellence for the table. It is a sure header. (Pkt. 10c) (oz. 35c) (¼ lb. \$1.20) (lb. \$3.50) postpaid.

Professional growers specialize; some in certain varieties of vegetables; some in assorted varieties, selected according to the soil and climatic conditions suited to each particular variety. Many growers specialize in flowers, others in grain and some in grasses. All have a reputation to make and to maintain if they would succeed. The seedsmen know these growers and their reputation for reliability and are seldom deceived by them. The result is that seeds are becoming more and more reliable from year to year through this intelligent co-operation of seedsmen and grower.

**Early Jersey Wakefield** Very early, maturing in 90 days. Small head inclined to point like the Winnigstadt. Recommended for home garden where earliness is desired. (Pkt. 10c) (oz. 35c) (¼ lb. \$1.20) (lb. \$3.50 postpaid).

## Copenhagen Market

At our trial grounds, the Copenhagen Market showed a remarkable uniformity of type. Heads slightly larger than the Cannon Ball, maturing about two weeks later, we recommend it to all growers and shippers as being superior to the Cannon Ball, it will yield more tonnage per acre.



Our European grower has given great praise to this variety. It is earlier, larger and better than the Winnigstadt for the local market or for shipping. It is grown more extensively for the markets of Northern Europe than any other variety. It excels because of its extreme tenderness and delicious flavor, which is compared with cauliflower. We give it urgent recommendation to all growers.

## Copenhagen Market

(Pkt. 10c) (oz. 40c) (¼ lb. \$1.35) (lb. \$4.00)

One grower reports having purchased from us ¼ lb. of Copenhagen Market seed with which he planted 1 1/8 acres from which he marketed \$524.00 worth, having sold his cabbage at \$40.00 per ton.

**Glory of Enkhuizen** The grower when introducing this for the home garden. It is similar in shape and habit to the Danish Ballhead, just ideal for the local market. (Pkt. 10c) (oz. 40c) (¼ lb. \$1.35) (lb. \$4.00) postpaid.

**Cannon Ball** (Short stem Danish Ballhead) This has become one of the standard varieties for shipping. It is now grown as extensively as the Winnigstadt but it is planted mostly during August and September for early shipping while Winnigstadt is preferred for mid-winter crop. (Pkt. 10c) (oz. 40c) (¼ lb. 1.35) (lb. \$4.00) postpaid.

**Late Drumhead** A large variety used extensively for making Liberty Cabbage. (Pkt. 10c) (oz. 35c) (¼ lb. \$1.20) (lb. \$3.50 postpaid).

**Drumhead Savoy** The best of all Savoy. Short stump, large size, solid head. (Pkt. 10c) (oz. 40c) (¼ lb. \$1.35) (lb. \$4.00) postpaid.

**Red Dutch** Heads of deep color and remarkably solid. Excellent for slaw. (Pkt. 10c) (oz. 40c) (¼ lb. \$1.35) (lb. \$4.00) postpaid.

**Autumn King** It is tender and of excellent mild flavor ideal for Liberty Cabbage, and it will yield more tons of good cabbage per acre than any other variety. (Pkt. 10c) (oz. 35c) (¼ lb. \$1.20) (lb. \$3.50) postpaid.

**A & M Early Drumhead** Year by year this variety becomes more and more popular. It is very early, tender, crisp, and just the right size for the dealer. Truckers like it because every stalk produces a head. (Pkt. 10c) (oz. 35c) (¼ lb. \$1.20) (lb. \$3.50)

# A & M Cauliflower

2,076 Carloads of Cauliflower Were Shipped out of Southern California in 1920; All of it Was the California Pearl Variety. If you are growing Cauliflower for the shipper, ask for circular of cultural instructions

## A & M Pearl Cauliflower

This wonderful Cauliflower is a great favorite from California to New York, because of its excellent shipping qualities. It originated here and has made Southern California famous for her excellent cauliflower. The California Pearl is thoroughly adapted to our mild winter climate and is particularly suited for shipping because of the flower being completely enveloped within spiral curled leaves, which protect the flower from injurious exposure to rain, sunshine or frost, but particularly from injury in packing and in transit. It retains its fresh appearance longer than any other variety. It is decidedly the shipper's favorite. It is the gardener's, the dealer's and the consumer's favorite. To be packed for shipping it is only necessary to cut the stem at the base of the head, and the leaves about two inches above the head. This leaves foliage enough to cover the crown without wrapping in paper. These heads are packed two layers in a crate (16 inches deep), with the base at the top and bottom, the crowns facing the center, usually 24 heads per crate.

The small grower may plant at any time from May until February, but for profit the large grower should carefully peruse instructions given with each variety.

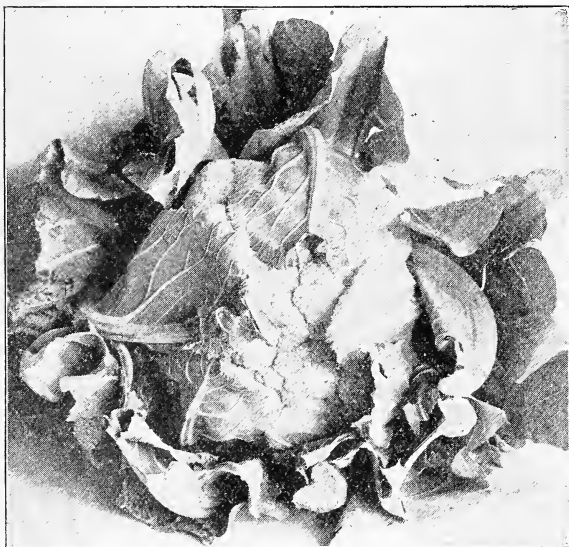
When you consider that the amount of cauliflower shipped from California each year runs into thousands of carloads, valued at \$1,000,000, and practically all of it is the California Pearl, the value of this type is of so great importance that we are proud to have been the introducers of it.

**Culture—(For Shippers)—**Choose soil from a rich loam to a heavy adobe. The field should be level to afford a uniform moisture. Avoid planting Cauliflower or Cabbage on a hill-side.

Early varieties should be planted in the seed bed from May 1st to July 1st. Late varieties from June 1st to August 1st. Early planting of seed is advised in order that the plant may have fully developed before the proper season for maturing. Growers are constantly endeavoring to mature a normal crop out of season. Proper culture will accomplish much toward producing a good crop but too much is expected out of the normal season.

Plants should be ready to transplant from six to eight weeks. Early varieties should be ready for market in November; late varieties in December and January, and later according to the time of planting the seed.

Do not attempt to grow Cauliflower or Cabbage unless you have water in abundance.



A & M Early Pearl

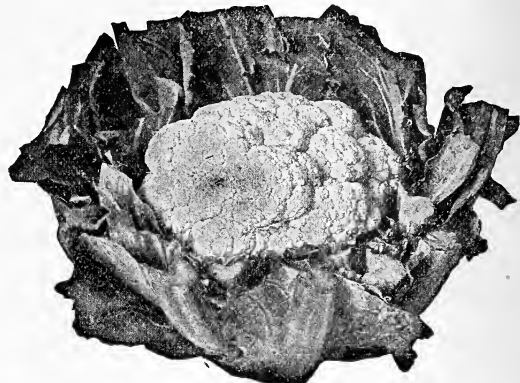
Trimmed to Ship

Worth \$1,000,000 annually

**A & M Late Pearl** Late Pearl Cauliflower attains a height of three to four feet. Plant seed during July to harvest during January and February. This is the variety that has made California Cauliflower famous throughout the United States and is bringing annually more than \$1,000,000 to growers. (Pkt. 10c) (1/4 oz. 65c) (oz. \$2.00) (1/4 lb. \$6.65) (lb. \$20.00) postpaid.

**Extra Early Pearl** Like the other strains of Pearl Cauliflower it may be depended upon to head up properly. The seed should be planted in May in order to market the crop in November. This is as early as the Snowball variety and when first offered three years ago created some excitement among Cauliflower growers because of its earliness and reliability.

Seed was scarce, we had none last season. We now have ample supply and offer it at half the price growers paid for it two years ago. (Pkt. 10c) (1/4 oz. 65c) (oz. \$2.00) (1/4 lb. \$6.50) (lb. \$20.00) postpaid.



A & M Snowball

**Snowball** This variety is in a class by itself for earliness. The demand for seed begins in April for May planting, which is ready for the local market beginning October 1st.

There is good profit in the early variety, but care should be exercised to avoid blighting by excessively hot weather. At such times apply water abundantly, but cultivate judiciously to prevent any baking of the soil. (Pkt. 25c) (1/4 oz. \$1.00) (oz. \$3.50) (1/4 lb. \$10.00) (lb. \$35.00) postpaid.

**Medium Early Pearl** Similar in all respects to the Extra Early and Late Pearl varieties except that it should be planted not earlier than June 1st nor later than August 1st. (Pkt. 10c) (1/4 oz. 65c) (1 oz. \$2.00) (1/4 lb. \$6.65) (lb. \$20.00).



How Cauliflower is Planted

The field is irrigated several days before and the furrow immediately after planting. Note the size of the plants, also see the water coming in the furrow.

"Last summer I purchased from you one ounce of medium Pearl Cauliflower seed. I planted it July 9th and transplanted October 4th. We cut the first heads March 7th. It is the finest Cauliflower I ever saw. The heads averaged about seven pounds, many more much heavier."

This Cauliflower was raised on the hills seven miles north of Woodlake without irrigation. My soil is very damp."

W. W. THOM, California.

The seedsman publishes a catalog that costs a fortune; in it, tells all he knows and mails it free to several hundred thousand people.

# A & M Table Carrots

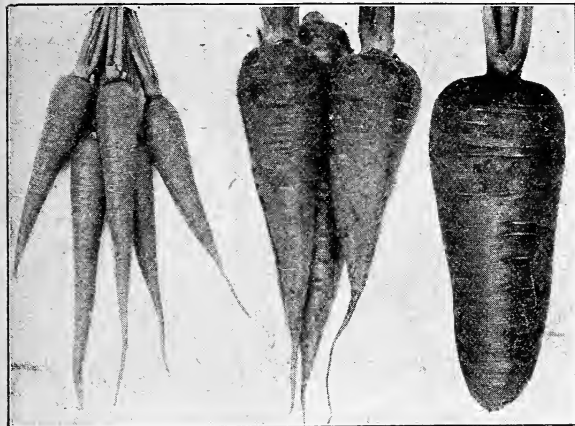
Culture—Sow one ounce of seed to 100 feet of row, four pounds per acre.

Carrots are very profitable because of the large quantity that a small patch can produce, and there is no waste, as any surplus may be fed to rabbits or other animals.

Carrots may be planted all the year round. Sow the seed from one-half to one inch deep in rich, moist, loamy soil, well prepared. Sow in rows eight inches apart, and as thin as the drill can be set to sow, or, if sown by hand, aim to have two seed to the inch, or sow in ridges same as lettuce. Plant the oxheart variety. It is the best for the table, and the most attractive for the market. The carrot has few insect enemies. Nematode is the worst. Irrigate same as for beets. Carrots are ready for use in eight weeks and remain palatable for six months or longer.

**Market**—The local demand for Carrots is all the year round, but the chief demand is from the shipper, who wants them from December 1st until May. For this trade the seed should be planted in August and September. The shipper wants the Chantenay, Oxheart and Danver Half Long.

There are many rabbit hutches within the city where carrots are used throughout the year. If you live a convenient distance from one of these places you may be able to secure a contract from the owner to furnish carrots. Chantenay and Danver's half long are now the favorites with large growers.



Long Orange

Chantenay

Danver

**Oxheart** Beautiful shape and color. The roots generally attain four or five inches in length, and about three inches in diameter. Quality first rate, very tender, like the Early Gem. is the market gardener's favorite. (Pkt. 10c) (oz. 20c) (¼ lb. 45c) (lb. \$1.25) postpaid.

**Improved Long Orange** A deep orange colored variety adapted for farm or garden culture. (Pkt. 10c) (oz. 20c) (¼ lb. 45c) (lb. \$1.25) postpaid.

**Chantenay** Flesh is a deep golden orange color, always smooth and fine in texture, very tender. (Pkt. 10c) (oz. 20c) (¼ lb. 45c) (lb. \$1.25) postpaid.

**Danver's Half Long** The roots are smooth and of a rich, dark orange color. One of the best sorts for a main crop because it remains edible in the fields longer than other varieties. (Pkt. 10c) (oz. 20c) (¼ lb. 45c) (lb. \$1.25) postpaid.

**Early French Forcing** A small sort but desirable on account of its extra early habit. (Pkt. 10c) (oz. 20c) (¼ lb. 50c) (lb. \$1.50) postpaid.

## A & M STOCK CARROTS

Carrots are healthy food for stock of all kinds and should be more generally grown.

Culture—Drill in rows 12 inches apart, and thin to three inches apart in the row. It requires five pounds of seed to plant an acre.

**Half Long White Belgian** Is raised exclusively for stock. Grows to a very large size; is easily gathered. Makes splendid food for cattle, horses and hogs; known to yield forty tons per acre. Will keep four or five months after pulling. (Pkt. 10c) (oz. 20c) (¼ lb. 40c) (lb. \$1.10) postpaid.

**Large Yellow Belgian** is similar to the above, but with a light orange color; said to be richer, but does not keep so well. (Pkt. 10c) (oz. 20c) (¼ lb. 40c) (lb. \$1.10) postpaid.

## CELERIAC

**Smooth Prague** A large celery flavored root used extensively for flavoring soups, pickles, etc.; also relished as a salad. (Pkt. 10c) (oz. 35c) (¼ lb. \$1.20) (lb. \$3.50) postpaid.

# A & M Celery

If you are growing celery for the shipper, ask for circular of cultural instructions.

Culture—Sow one-half ounce of seed to 100 feet of drill; ¼ lb. per acre. Sow the seed from Jan. 1st to May 1st, in drills six inches apart, not too thick in the row to secure stalky plants. In June when the plants are strong, transplant to furrows three feet apart and six inches deep. Set the plants six inches apart in the furrows; as the plant grows fill the earth toward the plant to secure proper bleaching. Never allow dirt to rest on the heart of the plant. Never work in celery when it is wet with rain or dew. Spray frequently with Bordeaux.

**Celery Rot**—Do not allow water to stand during the heat of the day after irrigating. It will cause Celery Rot in the early crop.

**Hollow Stem**—When the growth is rank and the stalks so close that free ventilation of air is retarded during the hot weather, the stems become soft and hollow; therefore, we recommend the single-row planting.

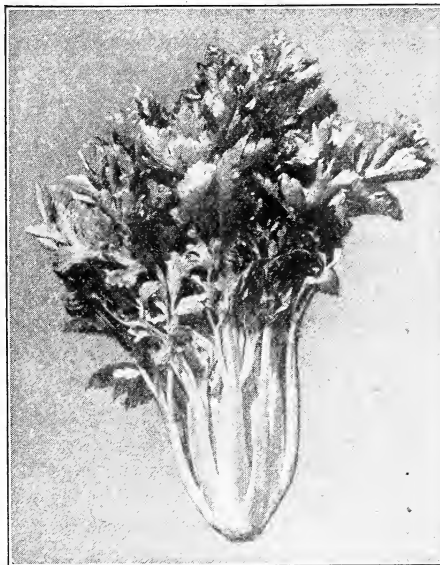
**Market**—The local consumption and outlying distribution disposes of a very large acreage, but owing to its erratic nature it requires a peculiar soil and professional culture. Therefore, there are few localities where it can be forced to earliness. May, June and July celery brings a high price to the grower. Then there comes an oversupply until the shipper disposes of it. When a surplus exists cold storage is resorted to, with doubtful profit, on account of the perishable nature, the shrinkage and the expense.

## Improved Golden Self Blanching (French grown seed.)

This is not the dwarf type that was sold heretofore. The French growers have discarded the former dwarf for a taller type. This new celery grows very rapidly. The outer leaves grow quite tall so that the grower is inclined to market it before the heart is mature enough, thus disappointing the merchant and causing real monetary loss.

This error may be avoided by allowing time enough for the heart to fill in. Do not harvest too soon.

By following these directions you will have the latest improved type of celery quite distinct from the California type (Pkt. 10c) (oz. \$1.50) (¼ lb. \$5.00) (lb. \$20.00) postpaid.



Actual Photograph of Golden Self-Blanching Celery, from California-grown Seed Grown by Capt. Nelson

**Golden Self Blanching** (California grown seed.) Another year has demonstrated that our strain of California grown seed is equal to the imported in producing good celery. Every grower in Florida who tried our California grown seed has ordered ever since in larger quantities. Our seed is now accepted by all who have used it as fully up to the imported. We offer it to you with our full recommendation. (Pkt. 10c) (oz. 80c) (¼ lb. \$2.65) (lb. \$8.00) postpaid.

**White Plume** California's grown. Its stock, inner leaves and heart are naturally white, so that simply drawing the soil up against the plant and pressing it in is all the work required for blanching. (Pkt. 10c) (oz. 40c) (¼ lb. \$1.35) (lb. \$4.00) postpaid.

## TAPE FOR TYING CELERY

Spools containing 1,000 yards in Red, White or Blue, \$6.75 per spool.

For hilling celery there is no better nor more convenient tool to do good work than the Planet Jr. Celery Hiller. See Planet Jr. Implements.

# A & M Sweet Corn

NOTE: Prices Given Include Postage

**Market.**—There is a uniform local demand for sweet corn throughout the season, from the earliest day it is offered until the last field is harvested. Therefore prepare to have some coming all through the season. Oregon Evergreen has not been surpassed since we introduced it. It is yet the best for the market gardener and the most productive.

**Culture** — Plant from February 15th to September 1st in hills 18 inches apart, in rows three feet apart. Allow two stalks to the hill, break off all side shoots; cultivate after each irrigation until the corn shades the ground; irrigate every two weeks until in the milk, then once or twice a week, and this will produce a solid tight husk, which will prevent the worms from doing much damage.

We are ever on the lookout for something better than that which we have. We are constantly trying out new varieties that show merit, but we studiously refrain from offering to our customers anything new unless it is better than that which we have. It is this policy that has kept the Oregon Evergreen so prominently before you for many years as the money-maker for the market gardener, it has not been excelled.

## A & M Oregon Evergreen

Oregon Evergreen corn now has the endorsement of every gardener that grows for the Los Angeles market. We are safe to say that any gardener growing this will show to his customers its superiority over all other sweet corn. It is many years since we first offered this new and distinct variety. The demand has grown each year until it is now practically the only variety offered on the Los Angeles market. The advantages of this corn over all others are its earliness, its large size, rarely less than eight inches long. The grains are full to the tip and delicious.

Oregon Evergreen.

The husk is very thick and folds so tightly over the grains that the worm does very little damage, compared with other varieties. It is desired by the peddler and groceryman because of its thick husk, and it can be held over two days before it appears old or wilted. It is very productive, often bearing five marketable ears. (Pkt. 10c) (½ lb. 20c) (lb. 35c) (10 lbs. \$3.00) prepaid.

**A & M Early Adams** This is a blend between the Oregon Evergreen and the Eastern Extra Early Adams. The superiority of this strain over the former eastern-grown Adams is shown in its earliness, large size and sweetness. It is nearly as good as the Oregon Evergreen, and it is earlier and harder. It is one of the many good things that originated here. Although it may be frosted when six inches high it will come again. (Pkt. 10c) (½ lb. 20c) (lb. 35c) (10 lbs. \$3.00) prepaid.

**A & M Large Adams** This is the best market variety to plant in August for late crop. It will mature in fifty-five days. (Pkt. 10c) (½ lb. 20c) (lb. 35c) (10 lbs. \$3.00) prepaid.

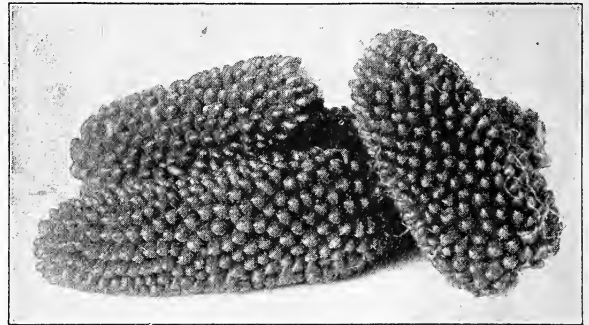
**Golden Bantam** Probably the very earliest variety for the home garden for first early. (Pkt. 10c) (½ lb. 20c) (lb. 35c) (10 lbs. \$3.00) prepaid.

**Country Gentleman** A delicious sweet corn. The ears where quality is preferred to size, it is excelled only by the Golden Bantam. The cob is very small, giving great depth to the kernels. The great merit of "Country Gentleman" is its fine quality. It matures in ten weeks. (Pkt. 10c) (½ lb. 20c) (lb. 35c) (10 lbs. \$3.00) prepaid.

**Stowell's Evergreen** If planted at the same time with earlier varieties and at intervals until November. It is hardy and productive, very tender and sugary, remaining a long time in a fresh condition. (Pkt. 10c) (½ lb. 20c) (lb. 35c) (10 lbs. \$3.00) prepaid.

**Black Mexican** One of the best sweet corns for this section. Deliciously sweet and tender very productive. (Pkt. 10c) (½ lb. 20c) (lb. 35c) (10 lbs. \$3.00) prepaid.

## Pop Corn



Doll Pop Corn

**Rice** Sharp pointed grain is preferred by vendors, but is not profitable to grow here at the usual price because of the devastations of the worm. (Per pkt. 10c) (lb. 30c) (10 lbs. \$2.50) prepaid.

**Pearl** This is the variety so extensively grown locally. It yields enormously and at the present price is very profitable. (Pkt. 10c) (lb. 30c) (10 lbs. \$2.50) prepaid.

**Yellow** Large smooth grains of Golden Yellow Color. It pops large, has excellent flavor and is the most profitable to grow. (Pkt. 10c) (lb. 30c) (10 lbs. \$2.50) prepaid.

**Doll Pop Corn** The best of all for the home garden. The commercial pop corn roaster prefers it, saying it is the best of all, but he cannot get enough of it because the comparative yield is small, therefore, not profitable to grow in large acreage. But for the home it very much excels all other varieties. (Pkt. 10c) (¼ lb. 20c) (lb. 50c) postpaid.

**FARM and HOME DRYING of FRUITS and VEGETABLES** The Bureau of Plant Industry, United States Department of Agriculture, has issued Farmers' Bulletin 984, "Farm and Home Drying of Fruits and Vegetables," by Joseph S. Caldwell.

The bulletin may be had without cost by writing Division of Publications, United States Department of Agriculture, Washington, D. C. Also, consult your local Farm Bureau.

## Service

When we started in business in 1893, Agriculture was not considered one of the sciences. We had no college of Agriculture at Davis, no get-together conventions for co-operative education. Each grower learned his lessons from hard personal experiences. A few progressives subscribed for agricultural papers and read them.

The Seed Catalogue was authority for some general instructions but it remained for the A & M Seed Co. to systematically search for the varieties of vegetables best suited to local soil and climate conditions, to give cultural instructions best suited to each condition of soil, to advise concerning insecticides and fertilizers.

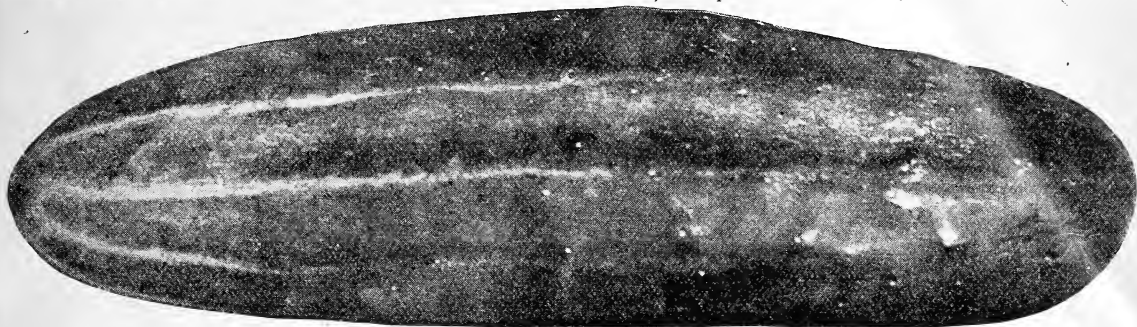
The popular vegetables annually shipped out of Southern California and the cultural methods so uniformly accepted are wonderful evidence that the work of the A & M Seed Co. was well done.

# A & M Cucumbers

**Culture for hot-bed:** Make the frame eight feet wide and as long as is desired, using 12 in. boards. Select a place with good loamy soil on a sunny slope. Mix the soil almost half and half with horse manure. About February 1st sow liberally with seed, in hills three feet apart each way. Stretch wire over the frame across and lengthwise. Sew muslin in widths and lengths to cover frame. Arrange to roll the mus-

lin on a stick as a curtain. Cover each evening, and open each day.

**Field Culture**—Plant from March to October in hills 4 to 6 feet each way, 8 to 10 seeds to a hill. Cover an inch deep. When danger of insects is past, thin out the plants, leaving 3 or 4 of the strongest in each hill. It is ready for the table in six weeks from planting seed. One ounce of seed will plant 50 hills; two pounds to the acre.



Klondike Cucumber

**Klondike** This cucumber has steadily grown into favor since we first offered it. It is the one variety that made carload shipments possible because it is firm, dark green color, and stays green until consumed; turns neither white nor yellow with age, but stays green. It is a desirable size, just 7 to 8 inches long, symmetrical in shape, and especially crisp and palatable. It is an excellent variety for pickling when young, as well as desirable for the market. (Pkt. 10c) (oz. 20c) (¼ lb. 60c) (lb. \$2.00) postpaid.

**Davis Perfect** This is the ideal cucumber. Long, slender, dark green, tender and crisp. It is the best all around cucumber yet offered for the family garden, and the hot house. Do not hesitate to plant this variety. (Pkt. 10c) (oz. 25c) (¼ lb. 85c) (lb. \$2.00) postpaid.

**White Spine** A popular, early variety for slicing. Very prolific, crisp and excellent for pickling when young. (Pkt. 10c) (oz. 20c) (¼ lb. 65c) (lb. \$2.00) postpaid.

**Improved Long Green** Dark green, firm and crisp; ten to twelve inches long, a favorite with home gardeners. Hotel trade like a long cucumber for slicing; this is ideal for such purpose. (Pkt. 10c) (oz. 25c) (¼ lb. 85c) (lb. \$2.50) postpaid.

**Japanese Climbing Cucumber** This variety should be grown more extensively; it is equal to others in quality and can be grown more economically in a small garden by planting near a fence or trellis of any kind, and climbs by tendrils as a grape vine. Whether space is a factor or not, we recommend it. (Pkt. 10c) (oz. 20c) (¼ lb. 65c) (lb. \$2.00) postpaid.

**Everbearing Cucumber** This variety is entirely distinct from all others on account of its close, bushy growth and everbearing character. The first cucumbers are ready very early and the vines continue to flower and produce fruit continually until late in the season, whether the ripe cucumbers are picked off or not, differing in this respect from all other varieties of cucumbers in cultivation. A single vine will show at the same time cucumbers in every stage of growth, the smaller ones being perfect in shape, of a fine green color, just the right size for pickling. As they grow larger they are entirely satisfactory as a slicing cucumber.

We recommend this to be planted in home gardens at all times, but especially in September. (Pkt. 10c) (oz. 20c) (¼ lb. 65c) (lb. \$2.00) postpaid.

**Chicago Pickling** This is the variety that is grown for the Los Angeles pickling factories. Thirty-five carloads were shipped in, possibly as many more came by auto truck. Our seed has given these growers satisfactory results for years.

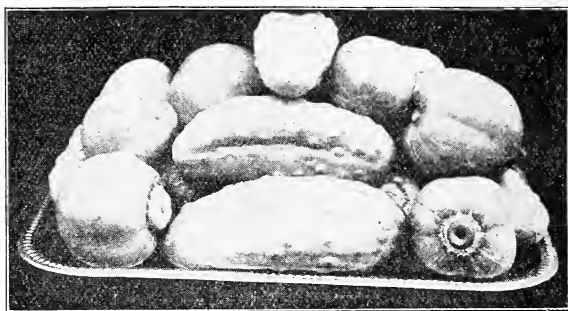
This variety is chosen because of its delicious quality and its shape, being one inch thick and three inches long when at pickling size. It is enormously prolific, bearing in clusters. We can recommend it for the home garden. (Pkt. 10c) (oz. 20c) (¼ lb. 65c) (lb. \$2.00) postpaid.



SMALL GHERKIN.

**Gherkin** This cucumber is the most delicious of all the cucumber family when properly pickled. It should be more extensively grown. Planted where it may climb on a trellis, one vine will cover a section of fence eight feet high and twelve feet wide, producing possibly a thousand or more of the delicious and oddly shaped gherkins. It should be planted to shade a window or back porch. (Pkt. 10c) (¼ lb. 90c) postpaid.

## THE SALAD CUCUMBER



Lemon and Salad Cucumbers

The grower who will specialize on this salad cucumber, introducing it into high class clubs and hotels will make a reputation for himself while he is building up a profitable business.

For this novel Cucumber we are indebted to Mrs. T. P. Mony, who had only a few seeds which she sent to us three years ago that we might grow some and if we thought it worth while we should offer it to our many customers.

This Salad Cucumber has the same delicious flavor of the now well known Lemon Cucumber. It has the shape of the Arlington White Spine but a bright yellow color.

We are sure that if every home garden would have a plot of this Salad Cucumber this season, few gardens would again have the green variety.

We advise using them when they have a light green or lemon color, but they are just as good when the color is bright yellow. There is never a bitter one. We are sure that any gardener will have no trouble to convince the buyers for cafeterias, exclusive hotels and clubs that this cucumber is superior to others and having done so will make a large income supplying them.

Mrs. Mony writes: "I consider it unexcelled for any purpose for which cucumbers are used. It makes delicious pickles. I felt it was too little known and needed to be put on the market that others might enjoy it."

Mrs. Mony is right in her testimonial and just as right in her kindly wish that others may enjoy this delicious Salad Cucumber.

The vines are very vigorous and enormously productive.

Be sure to plant a packet of seed.

To the market gardener we advise planting a small plot and convince the large buyers that it is better. (Pkt. 10c) (oz. 30c) (¼ lb. \$1.00) (lb. \$3.00) postpaid.

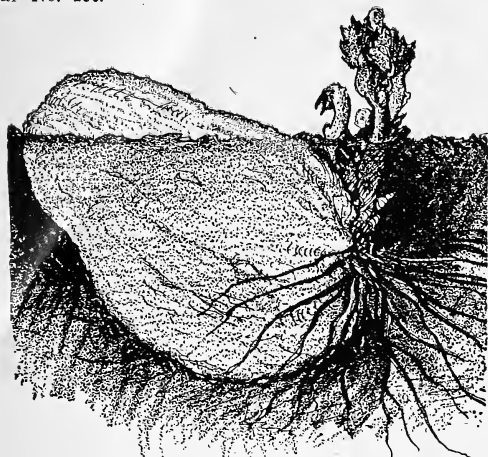
**Lemon Cucumber** At last after years of advertising and effort to educate the home-gardener to grow the Lemon Cucumber instead of the common long green type, we can now say that at least half the people are awake to the superiority of this delicious salad, and the other half will soon regret not having tried it earlier. Every one who has tried it is unanimous in its praise, and would not think of omitting it from the spring garden. It is the color of a lemon when ready to use, and similar in shape, being less pointed at the ends.

There is nothing but praise for the Lemon Cucumber. It may now be found at almost any vegetable stand, and no home garden should be without it. (Pkt. 10c) (oz. 30c) (¼ lb. \$1.00) (lb. \$3.00) postpaid.

# A & M Chayote

Write Dept. of Agriculture, Washington, D. C., for Circular No. 286.

The circular describes it fully and also gives cultural directions and recipes for cooking and serving. It can be had by sending five cents to the Superintendent of Documents, Government Printing Office, Washington, D. C., and asking for Circular No. 286.



Chayote as it Should be Planted

The Chayote is no longer a novelty. It has now become an article of commerce. It may be found on sale at every grocery store throughout the season, which lasts from October until March.

The vine is a rampant grower. The first year from seed it will grow twenty to thirty feet. Destroyed to the ground by frost, it soon sends out new growth, and during the second season will extend vines forty or fifty feet in every direction. During September it starts blooming, having a small, white, insignificant flower. Within four weeks the fruit is large enough for the table. One vine in two years if properly trellised will produce more than one thousand fruit.

**Cultural Directions** One fruit envelopes one seed, which sprouts from the large end. Plant where you intend it shall grow. Cover only the large end, leaving the small end exposed. (See picture.) Or let the fruit lie around until it has well sprouted, and then plant the seed, leaving the sprout well above ground. Water freely and do not be alarmed if frost should destroy it. A new shoot will soon appear. Give it abundance of water throughout the hot summer season.

Because of many complaints of failure to get them started we offer them already rooted. Rooted vines 50c each postpaid. One Chayote not rooted 35c postpaid. At the counter, rooted, 25c; not rooted, 20c.

## Recipes for Cooking the Chayote

Parboil, chop and casserole with tomato, onion and green peppers.

Fry as egg plant. Prepare as summer squash.

Use small ones, without peeling, boil until tender, cut in half, put a lump of butter, a little sugar, salt and pepper on each one. Put in oven a few minutes.

For larger ones: Peel and cut into cubes and boil; when done, drain, add butter and seasoning and fry in pan. Let simmer until butter burns. Just before serving put tablespoonful of vinegar on them.

Parboil young ones and serve as salad with mayonnaise dressing or with boiled dinner as turnips.

**Spanish Style:** Can be cooked Spanish with tomatoes and chili or bake in roasting pan with meat.

**Breaded:** Also to boil until tender, slice, dip in egg and cracker crumbs and fry it.

## Three Most Valuable Books for California

By Edward J. Wickson, A. M.

Formerly Emeritus Professor of Horticulture in the University of California; Editor of the Pacific Rural Press

**The California Fruits and How to Grow Them**  
Ninth Edition, 1921—Price \$4.00; postpaid \$4.15

**The California Vegetables in Garden and Field**  
Price \$2.00; postpaid \$2.15

**California Garden-Flowers, Shrubs, Trees and Vines**  
Price \$1.50; postpaid \$1.70

These three books are standard and authentic works on these subjects of fruit growing, vegetable raising and general flower gardening about the home. Written by one who knows California conditions thoroughly.

## A Word About Cucumbers

Planted from September 1st to 15th, in a sheltered place, will produce delicious cucumbers all through December and late into January. This has been done frequently, but so much depends upon the changeable climatic conditions each season that there is always a risk of failure, but it is worth a trial because the expense is small compared with the profit if you succeed. Six hundred dollars from one acre of cucumbers during the month of December is easily possible.

To prolong the vitality of your vines, pick all of marketable size every other day, and do not tread upon the vines when picking. To grow prize cucumbers, mix a handful of nitrate of soda with the soil about the hill when planting, and more as the vine grows.

## A & M HERBS

Herbs in general, delight in a rich, mellow soil. Sow the seed any time throughout the year, in shallow drills one foot apart; cover lightly with fine soil, and when up a few inches, thin out to proper distances apart, or transplant into prepared beds. Care should be taken to harvest properly; do this on a dry day, just before they come into full blossom. Dry quickly in the shade, pack in bottles or boxes to exclude the air; this will insure their being preserved in good condition for future use.

## PLANT DILL

Every year there is such a demand for green dill that the supply is short of the demand. Plant in any quantity, from ten feet square to one acre, but not more. Make several plantings to have it drag along, and sell what you can of the green dill and dry the balance

## Aromatic and Medicinal Herb Seeds

**Anise**—Used as a cordial and for garnishing and flavoring. Seeds have an agreeable aromatic taste. (Pkt. 10c) (oz. 35c).

**Basil**—Sweet. The leaves are used for flavoring soups, stews and highly seasoned dishes. (Pkt. 10c) (oz. 50c)

**Borage**—The leaves are used for flavoring and the flowers furnish bee pasture. (Pkt. 10c) (oz. 50c)

**Caraway**—Grown for the seeds, which are used extensively for flavoring of bread, pastry, etc. (Pkt. 10c) (oz. 25c)

**Catnip or Catmint**—The leaves are used for seasoning. It also makes an excellent bee pasture. (Pkt. 10c)

**Chervil**—Used in soups and salads. (Pkt. 10c) (oz. 15c)

**Coriander**—The seeds are used in the manufacture of liquors and confectionery. (Pkt. 10c) (oz. 25c)

**Dill**—The seeds have an aromatic odor and warm, pungent taste. They are used as a condiment and also for pickling cucumbers. (Pkt. 10c) (oz. 25c)

**Fennel**—Sweet. The boiled leaves are used in sauces. (Pkt. 10c) (oz. 30c)

**Marjoram**—Sweet. The leaves and the ends of the shoots are esteemed for seasoning in summer and are also dried for winter use. (Pkt. 10c) (oz. 75c)

**Rosemary**—The aromatic leaves are used for seasoning. (Pkt. 10c) (oz. \$1.00)

**Sage**—The most extensively used of all herbs as a seasoning for dressing. (Pkt. 10c) (oz. 75c)

**Summer Savory**—A hardy annual. The dried stems, leaves and flowers are extensively used for flavoring—particularly in dressings and soups. (Pkt. 10c) (oz. 75c)

**Saffron**—Used for flavoring. (Pkt. 10c)

## A & M COLLARDS

The Collard is an old-time favorite, adapted to all parts of the South, and as a producer of "greens" during winter and spring it has no equal. It will pay you to have a collard patch just to feed the chickens.

**Southern Georgia** This variety is the old-time favorite. It stands all sorts of adverse conditions without injury. Is very hardy. In many places where the soil is too poor to grow cabbage, the collard grows easily, and makes a good substitute for cabbage. (Pkt. 10c) (oz. 20c) (¼ lb. 60c) (lb. \$2.00) postpaid.

## A & M CRESS

**Pepper Grass** Sow curled or pepper grass thickly, in shallow drills, every two or three weeks. It should be cut often, and will continue to grow. It is used not only for salad, but on the breakfast table and for garnishing. Used with lettuce its pungency adds an agreeable flavor. (Pkt. 10c) (oz. 15c) (¼ lb. 50c) (lb. \$1.50) postpaid.

**True Water Cress** Should be sown in damp soil or if a stream of water can be utilized, it would be much better. It will also thrive well in damp cold frame. Rightly managed, its culture is very profitable. (Pkt. 10c) (oz. 60c) (¼ lb. \$2.00) postpaid.

## A & M CORN SALAD

Sow any time from October 1st until February. Plant and cultivate the same as lettuce. It is hardy in this climate. It is used for garnishing in the same manner as parsley cress. (Pkt. 10c) (oz. 30c) (¼ lb. \$1.00) postpaid.

## CHERVIL

**Curled Chervil** Seed should be sown only during the cooler months in rows 15 to 18 inches apart and thin to 4 to 6 inches apart in the rows in good garden soil. Chervil is used for garnishing and flavoring. (Pkt. 10c) (oz. 40c) (¼ lb. \$1.35) postpaid.

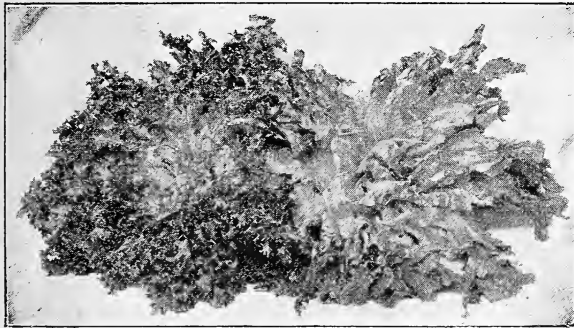
**A & M CHICORY****WITLOOF CHICORY.****Large Rooted**

The roots, dug in the fall, dried, cut in thin slices and finely ground, are used largely as a substitute for coffee. Seed should be sown quite thinly in shallow drills early in the spring. When well started, thin out to stand two or three inches apart in the row and give good cultivation all summer. (Pkt. 10c) (oz. 40c) (¼ lb. \$1.35) (lb. \$4.00) postpaid.

**Witloof** Sow the seed in deeply prepared ground during June, July and August. Thin out to four inches apart in rows twelve inches apart. In December make trenches ten inches deep and twelve or fifteen inches wide, and loosen the soil for ten or twelve inches deeper. Set the roots three inches apart in rows eight inches apart, within the

trench, so the tops of the roots are eight inches below the top of the trench. Then fill with a mixture of sand and humus, water thoroughly. In two to four weeks tender heads will form and be ready for use as a salad with French dressing.

This is a most delicious salad, and many Eastern growers are making a specialty of it, selling to hotels at fancy prices. We suggest it to mushrooms growers, believing it will go nicely hand-in-hand with the growing and marketing of mushrooms. (Pkt. 10c) (oz. 40c) (¼ lb. \$1.35) (lb. \$4.00) postpaid.

**A & M ENDIVE****Golden Heart****Batavian**

**Culture**—Same as for lettuce. Seed may be sown any time during the year. When plants are well started, thin out to ten inches apart or they may be transplanted. When plants have reached a good size, gather the leaves closely together and tie loosely in an upright bunch. This blanches the inner leaves in about ten days and adds to the crispness as a salad, as it renders the flavor mild and delicate. One ounce will sow 400 feet of row.

This plant furnishes an attractive and appetizing salad for the fall and winter months; by repeated sowings a supply may be had nearly all the year 'round.

Endive is now largely grown for the shipper. Its field culture is the same as for lettuce and it is sown about the same time.

**Green Curled Golden Heart** Leaves are finely curled or lacinated, giving the plants a rich, mossy appearance, which is greatly enhanced when the centers are nicely blanched.

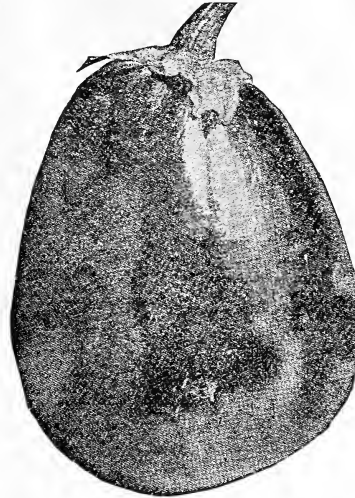
This is the variety generally preferred because it blanches to a beautiful golden yellow. (Pkt. 10c) (oz. 20c) (¼ lb. 65c) (lb. \$2.00) postpaid.

**White Curled** This beautiful variety does not need blanching to prepare it for use, the mid-ribs being naturally of a pale, golden yellow, the finely curled leaves are almost white. (Pkt. 10c) (oz. 20c) (¼ lb. 65c) (lb. \$2.00) postpaid.

**Batavian or Escarol** Forms large heads of broad, thick leaves, which can be blanched for a salad or it will make excellent cooked greens, as well as being useful to flavor soups, stews, etc. (Pkt. 10c) (oz. 20c) (¼ lb. 65c) (lb. \$2.00) postpaid.

**A & M EGG PLANT**

**Market**—The sale of Egg Plant does not compare favorably with other produce, and the consumption is not large. It is owing to the productiveness of the Egg Plant which makes it at all profitable during the season of abundance. A small acreage yields enormously, but it is the very early Egg Plant which makes a profit, such as \$1000.00 per acre. May and June are considered early.



**Culture**—The seed should be sown in a hotbed during December or January; it is slow to germinate and requires warm and even temperature. The plants should be ready to set out by April 1st, and may be planted as late as August 1st. Plant eighteen inches apart. Keep well watered, and pick closely as soon as large enough. In very warm protected spots they will survive the winter. Even if the foliage is destroyed sprouts may appear the following spring from the stem beneath the soil.

**New York Improved Spineless Egg Plant** and mature marketable fruit the following May. Egg Plants require four to six months to mature. One-fourth pound of seed is sufficient to plant an acre.

**New York Improved** This variety has superseded all others, both for market and home use. The large size and high quality of its fruit and its extreme productiveness make it the most profitable for the market gardener. It is spineless, which is a great advantage in shipping. (Pkt. 10c) (oz. 75c) (¼ lb. \$2.50) (lb. \$7.50) postpaid.

**Black Beauty** Is preferred by growers for the early market because it matures marketable size fruit earlier than any other variety, and because the fruit is dark colored, when quite young and uniformly over the entire surface. It is entirely free from spines. It is popular because it is a moneymaker. (Pkt. 10c) (oz. 75c) (¼ lb. \$2.50) (lb. \$7.50) postpaid.

**The Tree Egg Plant**

This variety is of medium size and extremely good shape, being particularly adapted to slicing, as there is no waste of material. It resists drouth and bad weather to a wonderful degree, partly on account of its strong, upright growth. It bears its fruit sometimes one or two feet above the ground, thus escaping liability to rot. It is very satisfactory for the home garden. (Pkt. 10c) (oz. 75c) (¼ lb. \$2.50) (½ lb. \$4.00) (lb. \$7.50) postpaid.

**A & M KOHL RABBI**

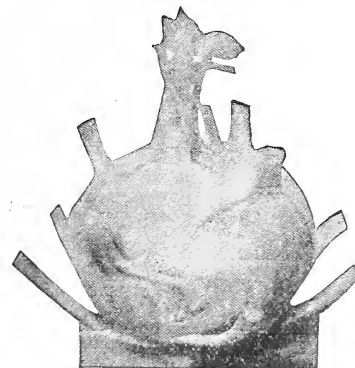
**Culture**—Seed may be sown every month in the year. Drill on ridges same as beets. Thin to three inches apart. An ounce of seed will produce 2000 plants.

**Early White Vienna**

The earliest sort, very tender, excellent for table use. (Pkt. 10c) (oz. 30c) (¼ lb. \$1.00) (lb. \$3.00) postpaid.

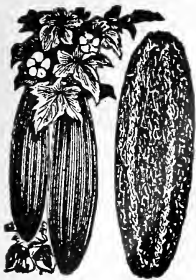
**Early Purple Vienna**

Similar to above, but has flesh of purple color. (Pkt. 10c) (oz. 30c) (¼ lb. \$1.00) (lb. \$3.00) postpaid.

**A & M Kohl Rabbi**

A conscientious, painstaking, seedsman is an educator and up-builder in his community.

## GOURD



Culture—Gourds are tender annuals, of trailing or climbing habit. The seed should not be planted until the ground is warm. Plant in hills and cultivate as cucumbers. Leave only two plants in a hill, and allow the vines to ramble or train over a trellis for shading windows.

**Dish Rag Gourd** The peculiar fibre within the gourd gives it its name. The fruit grows about one foot long. The interior fibre is serviceable for a variety of household purposes, being used as a dish cloth, or sponge. The fibre is tough, elastic and durable. (Pkt. 10c)

**Mock Orange** A good old sort, finding its way into the family sewing basket. A beautiful and rapid climber, quickly covering trellises. (Pkt. 10c)

**Hercules Club** This often grows to a length of four feet. This is not the same as the New Guinea Butter Bean which it resembles. (Pkt. 10c)  
**Dipper.**—Bowl with long handle. (Pkt. 10c).  
**Bottle.**—Bowl with short handle. (Pkt. 10c).  
**Pipe.**—Often made into pipe for smoking tobacco. (Pkt. 10c).  
**Ornamental.**—Small odd shapes and colors. (Pkt. 10c).  
**Nest Egg.**—(Pkt. 10c).  
**Mixed Gourds.**—(Pkt. 10c).

The Mexican knows the value of the Gourd for arbor purposes. It is a rampant grower in this climate. The Gourd is used for as many purposes as it has shapes. Bowl, dipper, pipe, trough, nest egg bottle, dish-rag and ornamental.

Buy a packet of mixed Gourds.

## Edible Gourd

New Guinea Butter Bean as an Arbor Plant Same as any Gourd

Lately advertised as New Guinea Bean. Has been a common table vegetable in China from time immemorial.

All of us have curiosities and many persons have reported to us how "Good is this New Guinea Bean." We tried it and sure enough we found it even better than the most delicious marrow. (Pkt. 10c) (oz. 30c) (¼ lb. 90c) postpaid.

**Recipe:** Take fresh from the vine a young gourd about sixteen inches long and three inches in diameter or smaller, while the fuzzy growth is yet on. Cut into cubes about ¾ inch, bring to a boil, pour off the water once or twice. Season well with pepper and salt, add butter. You will be surprised how good it is.

**A & M Leek** We believe in having the best of everything. With this idea always before us, we have secured this fancy strain of leek. It is large, white, tender and mild—the best in the world. Its mild, delicate flavor makes a delightful addition to lettuce salad. (Pkt. 10c) (oz. 35c) (¼ lb. \$1.15) (lb. \$3.50) postpaid.

The seedsmen's duties do not end with the buying of seeds; he must educate the customer. Probably more than 75% of the errors and disappointments are because of the lack of knowledge on the part of the buyer who has seen good results of certain crops and fails to note the time of planting, climatic and soil conditions under which these crops were grown. He buys and plants the same kind of seeds, probably out of season and under his own conditions, which may be entirely different, with the result that there is whole or partial failure which he promptly attributes to inferior seed.

## PACKET SEEDS THAT GROW

Look for this case. If your dealer does not carry Aggeler & Musser Seed Co.'s packet seeds request him to get them, because we do not put our seeds out on commission. Commission seeds are put up and placed on sale throughout the country in August, long before the new crop seeds are harvested. Therefore the seeds are at least one year old before they are put into packets. Our packets are never put up until the new crop seed has been delivered. You are sure to get fresh seeds when you buy them from the AGGELER & MUSSER SEED CO.'S CASE.

Success is more certain if the seed be selected to suit the soil, season and purpose. This catalog will help you make the proper selection.

## A & M KALE



Siberian Kale

Culture—Seed should be sown thinly in drills, about the middle of June for the tall sorts; transplant the young plants twelve inches apart in rows three feet apart. Later in the season the dwarf sorts may be sown rather thickly in drills to furnish small heads to be cooked like spinach. One ounce to 100 feet of drill.

**Tall Scotch** This makes a beautiful plant, 3 to 8 feet tall. (Pkt. 10c) (oz. 25c) (¼ lb. 65c) (lb. \$2.00) postpaid.

**Jersey Kale** A tall variety with smooth leaves. Especially used for poultry greens. (Pkt. 10c) (oz. 20c) (¼ lb. 45c) (lb. \$1.25) postpaid.

**Siberian or Thousand Headed Kale** We believe this to be superior to other varieties because it grows more greens for poultry, and is of better flavor for the table. (Pkt. 10c) (oz. 20c) (¼ lb. 50c) (lb. \$1.50) postpaid.

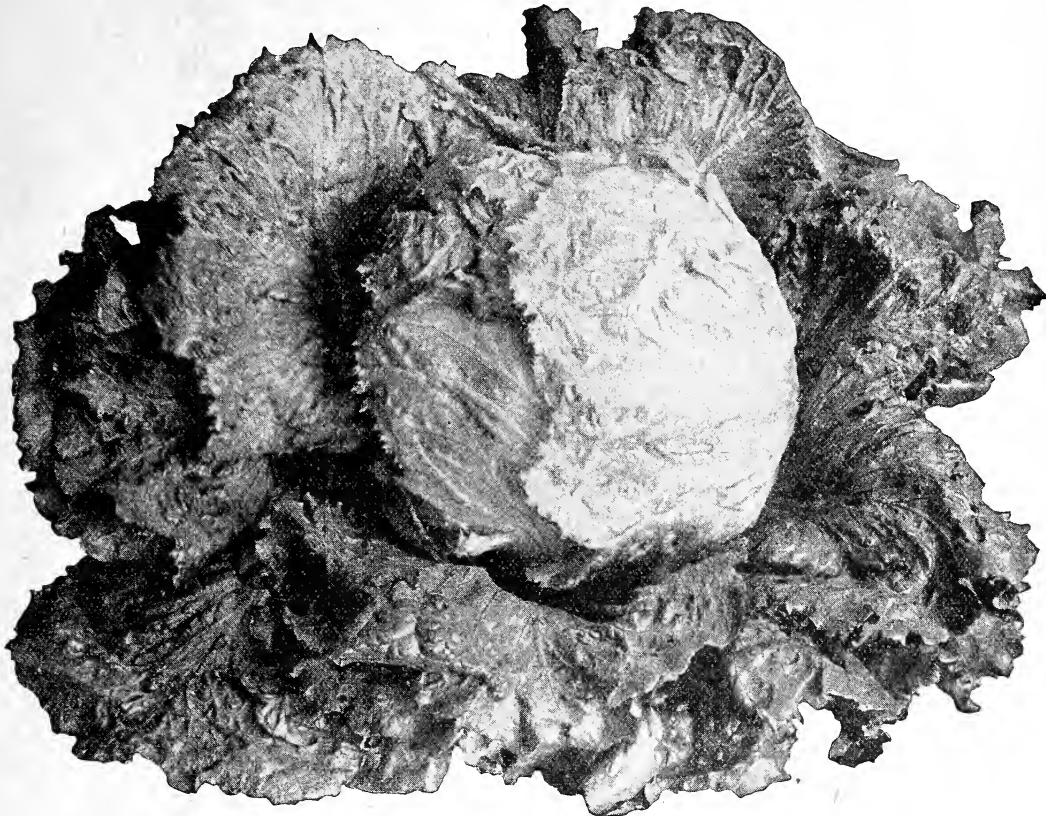
There is no better green feed for poultry nor none more easily grown. It may be transplanted at any vacant place in the garden.



Look For This Case at Your Local Dealer's.

# A & M Lettuce

If you are growing lettuce for the shipper, ask for circular of cultural instructions.



A & M Los Angeles Market or New York Special

**Los Angeles Market (New York)** The Los Angeles Market is also called the New York Lettuce and in many localities it is known by no other name.

This is the variety that has made Los Angeles the richest agricultural county in the United States. We introduced this lettuce and started the long distance shipping when we shipped the first crate to Philadelphia in 1904.

It is the largest and most solid heading variety in existence, often weighing 2½ and 3 pounds a head and always a prize winner.

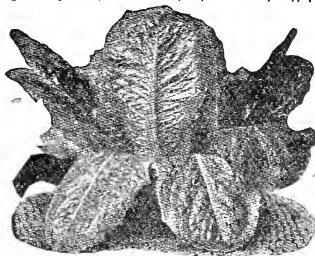
The big planting time is during September and October when the new seed has just been harvested. This new seed germinates so irregularly that planted during September it will keep coming up until January. On this account we always have a supply of seed carried over from the previous season which germinates quickly and uniformly. Our seed has such a reputation for reliability that many growers will have no other. (Pkt. 10c) (oz. 30c) (¼ lb. \$1.00) (lb. \$3.00) postpaid.

**Iceberg** This is next to Los Angeles Market as the heading variety for the Southwest for the summer planting. Of course it is better during the winter months, but not so solid as the Los Angeles Market, which is strictly a winter variety, while the Iceberg is a good all-season lettuce, and hundreds of carloads of Iceberg are being shipped when the other is not available. Iceberg Lettuce planted later than March 1st should be grown on dark, heavy soil, because if grown on light, sandy soil, the heat of the sun reflected from the sand on the under side of the leaves causes them to burn almost to the heart.

The light green, curled, red-tinged leaves of the Iceberg form heads as large as the Los Angeles Market, but not so solid, but it is as tender and crisp, and is of excellent flavor. (Pkt. 10c) (oz. 20c) (¼ lb. 65c) (lb. \$2.00) postpaid.

**Hanson** Without exception this is the best variety for late spring and mid-summer crop. Prof. F. W. Mally, Farm Demonstrator of Webb County, Texas, discovered Hanson Lettuce to be resistant to both heat and disease, and particularly resistant to eel worm which is often prevalent where least expected. Hanson Lettuce is similar to the Iceberg Lettuce, except that it has not the tinge of red. We recommend it for the home garden. (Pkt. 10c) (oz. 20c) (¼ lb. 65c) (lb. \$2.00) postpaid.

**Early Curled Simpson** This is a very popular variety as a loose leaf lettuce. The leaves are large, thin, very tender and of a very good quality. (Pkt. 10c) (oz. 20c) (¼ lb. 50c) (lb. \$1.50) postpaid.



Paris White Cos (Romaine)

**Paris White Cos**  
(Romaine)

This might well be spoken of as the "Aristocrat" for the reason it is used almost exclusively at aristocratic clubs and hotels for salads, because it is crisp and has a delicious, nutty flavor.

Gardeners would profit to give more attention to this variety. (Pkt. 10c) (oz. 20c) (¼ lb. 60c) (lb. \$1.75) postpaid.

**Big Boston** Very large, smooth-leaved, solid-heading variety grown extensively throughout the east and south. It is congenial to all climates, and is a good shipper. In flavor it probably excels all other smooth-leaved varieties. An excellent all-year 'round lettuce. (Pkt. 10c) (oz. 25c) (¼ lb. 85c) (lb. \$2.50) postpaid.

**Grand Rapids** Similar to Early Curled Simpson. The luxuriant growth makes it a desirable variety for the poultryman. It is also an excellent variety for the table and good all the year. (Pkt. 10c) (oz. 20c) (¼ lb. 50c) (lb. \$1.50) postpaid.

## To the Newcomer or Beginner

Do not hesitate to take advantage of this offer to put at your disposal all the information we have accumulated during a period of thirty years. Read the catalog carefully and if we fail to have answered your questions, do not hesitate to ask what you wish to know concerning your problems.

We have gone to a great expense to put this catalog before you, feeling it is a duty to, not only have good seed, but to aid in every way possible that our seed may produce maximum results. We aim to have our catalog a source of education and our seeds a dependable source of wealth.

Protect Your Plants Against  
Frost and Insects

## PAPER PLANT COVERS

For Early Cucumbers, Melons and Squash

The Only Sure Protection



The Paper Plant Cover is the only sure protection against late frost and insects during the early growth of your vines and at an insignificant expense as compared with the cost of insecticides, the continual labor of combatting insects and other pests, and the cost of replanting, besides having a large percentage of vacant hills.

**THE PAPER PLANT COVER** prevents all this at a cost of less than 1 cent per hill.

Samples will be furnished upon request.

		Price F. O. B. Here			
Size	Approx. Wt.	100	1000 to 4000	5000 to 9000	10,000 or more
		Per M	Price	Per M	Per M
15x16	15 lbs. 3 oz.	40c	\$3.85	\$3.60	\$3.30
16x18	17 lbs.	50c	4.15	3.85	3.60

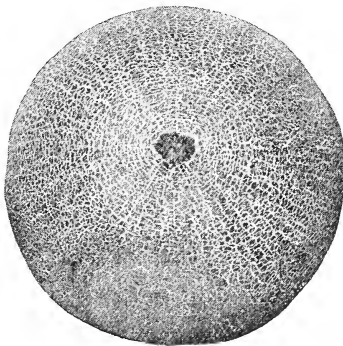
## CULTURE FOR MELONS

The soil must be thoroughly soaked down to submoisture, either by rain or irrigation. When dry enough plow ten or twelve inches deep. Thoroughly pulverize the soil. Make furrows eight to ten inches deep.

Plant the seed in the furrow at regular distances apart, six feet for muskmelons; eight feet for casabas, and nine feet for watermelons. Plant from February 15 until June 15. For late shipping June is the best month for planting the Golden Beauty.

As the plant grows gather the soil around it until the roots are twelve inches or more below the surface. Thin out all surplus plants as soon as they are hardy and well established.

### A & M Persian Melon



A & M Persian

Culture the same as for muskmelons. For several years we have labored to get this melon pure. Heretofore the greatest drawback to the grower was the large percentage of off-type and culls. But at last we are able to announce that our seed field was practically 100% pure; therefore, do not hesitate to plant this melon. It is in a class by itself. Large, extremely netted, without ridges, thick yellow flesh of delightful flavor. A good keeper and a good shipper. It should be picked while yet quite solid. Customers should be educated to purchase half a dozen at a time and set them away to be eaten as they become mellow like a Casaba. When properly picked they are ready for the table within six to ten days. (Pkt. 10c) (oz. 50c) (¼ lb. \$1.65) (lb. \$5.00) postpaid.

### HOT-CAP PAPER PLANT COVER

Because of the convenience of setting the Hot-Cap Cover it has become very popular. So constructed that the wind cannot blow them away, because the machine places dirt around the edges. They are already folded ready for use. One man can do the work of four. After setting the field looks uniform, like a well kept garden. Machine for setting and carrying covers \$4.50.

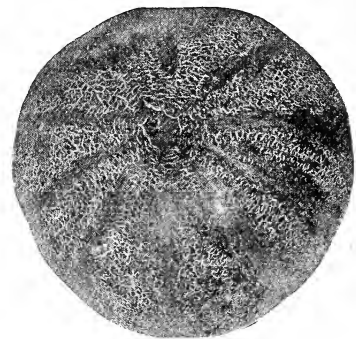
### Hot-Cap Plant Covers. Price F. O. B. Here

1,000	\$6.25	10,000	5.80
5,000	6.00	25,000	5.50

The rows are now straight and an equal distance apart. This makes it easy to cultivate close to the hills, both lengthwise and crosswise. Cultivate deeply as long as there is no danger of disturbing the roots. Be always mindful that the roots are as long as the vine, therefore when working close to the hills and among the vines, let the hoeing or cultivating be shallow. Always cultivate the irrigation furrow as soon as the soil is dry enough to mulch nicely.

If this rule is intelligently adhered to your vines will never suffer from drouth, or root blight, and will be healthier in every way, because the roots are deep down in the cool, moist earth unaffected by the heat of the sun. This is the secret of success with all midsummer crops.

### THE TURKISH MELON



Turkish Melon

**The Turkish Melon** This is one of the excellent melons brought to California by the Armenians. Its flavor is equal to the Persian melon. It has yellow flesh and resembles the Persian melon in every way except that it shows on the rind a faint stripe and is without the heavy netting. Do not hesitate to order it for it is just as good as the Persian for the home garden or near by market. (Pkt. 10c) (oz. 30c) (¼ lb. \$1.00) (lb. \$3.00) postpaid.

**Winter Pineapple** This is the first of Casabas introduced into America. We have carefully maintained the purity of type so that it is now just as distinct as when introduced more than forty years ago. This and the Golden Beauty are identical in all except color, which when mature is light green. The Winter Pineapple is more profitable as a late melon, therefore we recommend to growers near the Coast that it be planted during June. Our type of Winter Pineapple is round, selected for its good shipping qualities. (Pkt. 10c) (oz. 25c) (¼ lb. 80c) (lb. \$2.50) postpaid.

## A & M Casabas

The best way to keep the Casaba late into the fall is to gather them together about the hill and cover them completely with the vines, but do not pick them off the vine.

The Casaba is a great credit to Aggeler and Musser Seed Company. The Original Winter Pineapple Casaba imported from Persia fully forty years ago was the only Casaba grown in America until 1899. We discovered a Hybrid. We at once recognized it as something different and far superior to the parent Casaba. It is due to our persistent advertising and to our vigilance in keeping the seed pure that we have today this wonderful Hybrid, Casaba.

In the meanwhile the original Winter Pineapple developed a spot that showed a tendency to turn yellow. Under the direction of Mr. Sprinkle of Burbank this tendency toward yellow was encouraged until perfected and "Fixed." We then introduced the Golden Beauty and maintained its purity. It rapidly superseded its parent Casaba in popularity to the extent that one rarely sees a green one on the market. The Golden Beauty is now one of the melons of commerce just as is the Rocky-ford or the watermelon and the shipments over the country runs into thousands of carloads.

### A & M Hybrid

This is a cross between the Winter Pineapple and the Montreuil Muskmelon. It grows to a very large size and is of delicious flavor. It is a rampart grower and yields enormously; as many as seventeen large melons were taken from one vine. It is profitable early and late. This melon is now grown as extensively for a midsummer crop as the muskmelon, and finds a ready sale. It originated locally, and is distinctly a Los Angeles product. The people are now fully awake to the delicious flavor of this Casaba. For the home garden or for the local market plant the Prince of All Casabas.

Plant from March 1st until July 15th. (Pkt. 10c) (oz. 25c) (¼ lb. 85c) (lb. \$2.50) postpaid.

**Golden Hybrid** Just as the green Pineapple Casaba changed to the bright yellow Golden Beauty, so did the large green Hybrid Casaba change to the Golden Hybrid which we introduced in 1917.

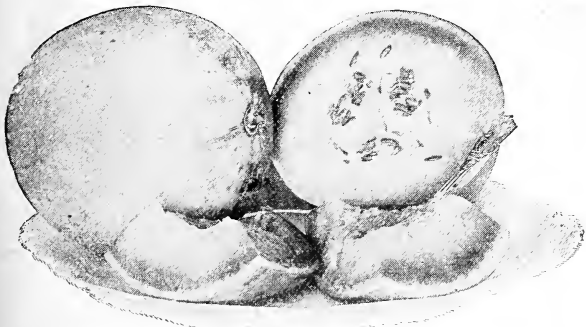
At that time we stated that it would in a few years supersede the Green Hybrid.

The season of 1924 showed on the market that a much larger acreage had been planted to Golden Hybrid. It has superseded the large green Hybrid. This is easily accounted for. The dealers say that it is just as good as the Green Hybrid, and the golden color makes it a better seller. It is no longer necessary to give special recommendation to the Golden Hybrid—it is now established as one of the best sellers. (Pkt. 10c) (oz. 35c) (¼ lb. \$1.00) (lb. \$3.00) postpaid.

**Yellow Fleshed Honey Dew** When the Honey Dew Melon was introduced it quickly became popular. One would not believe another melon could be better, but the Honey Dew hybridized with the Tip Top produced a melon of the same outside appearance as the Honey Dew but with a deep yellow flesh that is positively more delicious. Do not hesitate to plant it if for the home garden or for shipping. (Pkt. 10c) (oz. 30c) (¼ lb. \$1.00) (lb. \$3.00) postpaid.

### A & M Honey Dew

The melon with an appropriate name

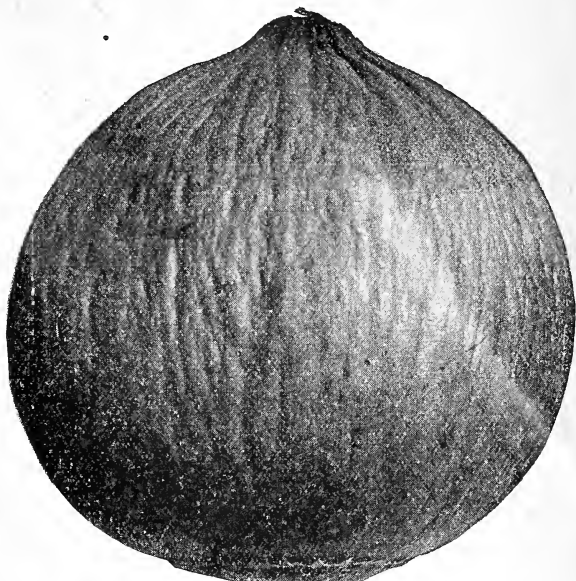


A & M Honey Dew

**A & M Honey Dew** This melon has won its way in to favor wholly because of its excellent flavor and good keeping qualities. It is enormously prolific. It is ready to pull when the green luster has changed toward a creamy yellow. It is not ready to be eaten until like the Casaba, you can make an impression with the thumb as in a mellow apple.

The picture is typical of its shape; the average size is about as large as a cocoanut, but the smaller sized melons are not inferior in flavor. Every melon is a good one. Flesh is light green and sweet as honey. The rind is light green or silvery-gray in color, smooth as an egg and hard as the rind of a winter squash. It is therefore a good shipper.

(Pkt. 10c) (oz. 25c) (¼ lb. 85c) (lb. \$2.50) postpaid.



Golden Beauty

**Golden Beauty** Introduced by us in 1906, it at once became popular locally. It is now grown more extensively throughout California than any other casaba because of its beautiful appearance, excellent shipping qualities and delicious flavor. It is the casaba that added much to the fame of California, as well as adding a million dollars each year to the wealth of the state. (Pkt. 10c) (oz. 25c) (¼ lb. 80c) (lb. \$2.50) postpaid.

### Santa Claus

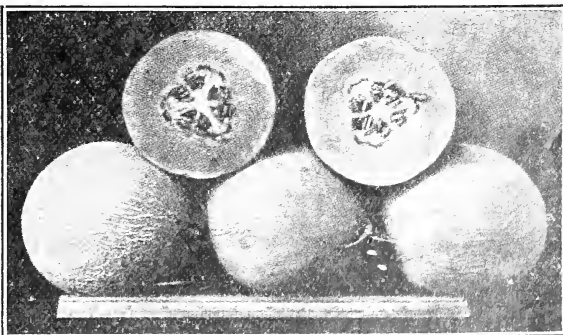
The name is appropriate to the melon. It is a delightful present to send to your Eastern friends at Christmas. It is of delicious flavor, beautiful in its mottled gold and black coloring, and readily keeps until January. We advise that it be grown more extensively for the local trade. The supply has not been equal to the demand for several years. (Pkt. 10c) (oz. 25c) (¼ lb. 80c) (lb. \$2.50) prepaid.



Santa Claus

not been equal to the demand for several years. (Pkt. 10c) (oz. 25c) (¼ lb. 80c) (lb. \$2.50) prepaid.

**Honey Ball** This Melon originated in Farrant County, Texas, propagated by W. H. Parker and introduced by him two years ago. It at once became very popular. It resembles in appearance the Honey Dew and the flavor is blended with the popular Texas Cannonball. The Honey Ball is a cross between the two. It is a good long distance shipper and may supersede the popular Rocky Ford Melon. Average weight is 4 lbs. (Pkt. 10c) (oz. 35c) (¼ lb. \$1.00) (lb. \$3.00) prepaid.

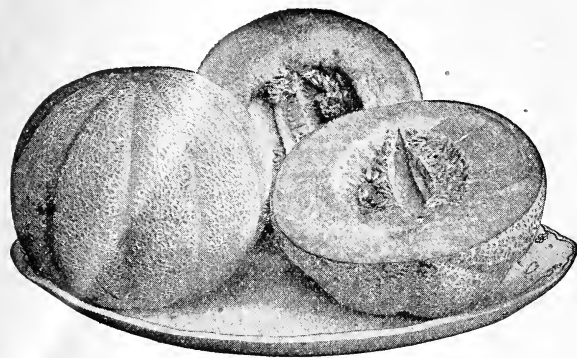


Honey Ball

# A & M Muskmelons

See paper caps

If you are growing musk melons for the shipper, ask for circular of cultural instructions.

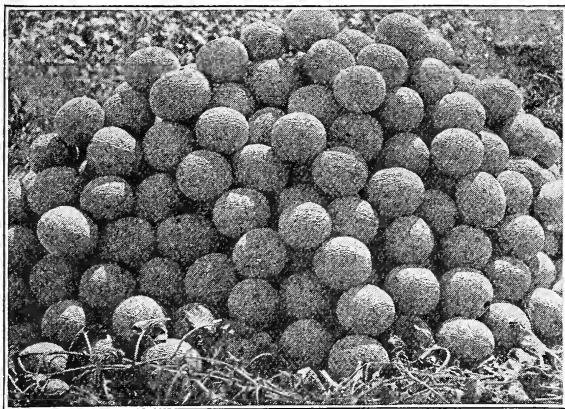


A &amp; M Famous Indiana

**The Famous Indiana** This picture perfectly portrays the melon, which has a rich yellow flesh and a flavor that may be compared with the Persian.

A letter from our grower says: "All melons are fully up to your description. The Indiana is by far the best melon that I am growing for you; the seed is very pure, as all the melons are uniform in appearance. It is heavily netted, very thick meat and holds up in good condition for several days. (Pkt. 10c) (oz. 30c) (¼ lb. \$1.00) (lb. \$3.00) postpaid.

**Improved Burrell's Gem** Has established itself as a standard melon. It is one of the biggest yielders. The shipper calls for it because it is solid and carries well in transit. The consumer wants it because of its excellent flavor. The growers all want our seed because we have the best strain. (Pkt. 10c) (oz. 20c) (¼ lb. 50c) (lb. \$1.50) postpaid.



Pollock 10-25

**Pollock 10-25** This is the latest improved strain of the popular Rocky Ford. It eliminates every defect of all other strains. Perfect in size, shape, netting, flavor, and long keeping and good shipping qualities. Our seed is pure. (Pkt. 10c) (oz. 25c) (¼ lb. 75c) (lb. \$2.00) postpaid.

**Our Gold Lined Netted Rock** This is the Rocky Ford with the tinge of yellow around the seed cavity bred up to the highest state of perfection from the rust-resistant strain. The heavy netting forms a rind so hard that it will ship to the far Eastern markets with practically no deterioration. (Pkt. 10c) (oz. 25c) (¼ lb. 75c) (lb. \$2.00) postpaid.

**Greeley Wonder** Originated at Greeley, Colorado. In appearance and flavor it very much resembles our Famous Indiana, but not so large. It is a cross between the old time favorites, Emerald Gem and Jenny Lind. This melon is as popular in Colorado as the Tip Top is here. We have tried it here, it grows to perfection and we recommend it to growers as being on a par with the Famous Indiana, Irondequoit or Tip Top. (Pkt. 10c) (oz. 35c) (¼ lb. \$1.00) (lb. \$3.00) prepaid.

**Whites Favorite** This muskmelon should become very popular. It will build up a roadside business as quickly as did Famous Indiana.

The flesh is white without fibre. It melts away like the flesh of the Hybrid Casaba and is as sweet. The rind is creamy yellow, scantily netted but with large ridges. No muskmelon is so prolific. It is ideal for the home garden or to grow for a roadside market. (Pkt. 10c) (oz. 20c) (¼ lb. 50c) (lb. \$1.75) Postpaid.

Wood Bros., who have a wayside market south of Anaheim say, "This melon is our best seller, every one is a good melon. A customer always comes back for more. You said it right. It is the melon for a wayside market."

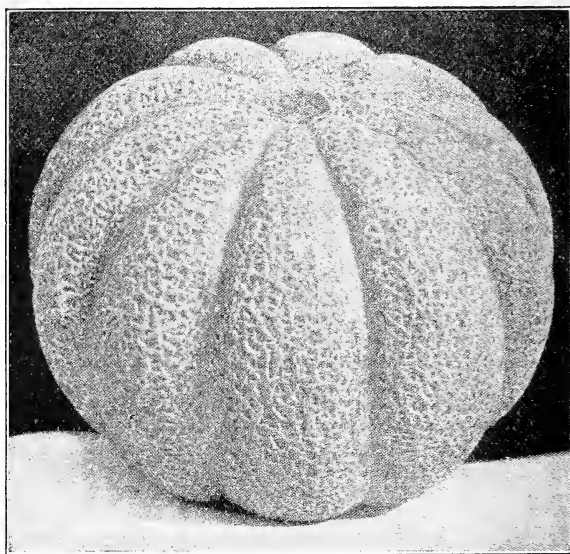
**Rocky Ford** This is an improved Netted Gem, oblong, slightly ribbed, heavily netted, having green flesh of excellent flavor. A very early small melon. (Pkt. 10c) (oz. 20c) (¼ lb. 50c) (lb. \$1.50) postpaid.

**The Original Gautier Pineapple** It is medium to large size, heavily netted, green fleshed with excellent flavor; solid and a good carrier.

We have the true type and recommend it to melon growers that they may again get the Old Original Pineapple Muskmelon. (Pkt. 10c) (oz. 20c) (¼ lb. 60c) (lb. \$1.75) postpaid.

**A & M Tip Top** This popular muskmelon is another triumph for Aggeler and Musser Seed Company because of our effort years ago to introduce it. The gardener was slow to accept it, but knowing its merits we persisted in offering it. It is now the most popular muskmelon grown for the local market. We have the right strain as you can see in the picture. The yellow flesh is edible to the rind. The melon is of medium size. Our seed is pure. (Pkt. 10c) (oz. 25c) (¼ lb. 85c) (lb. \$2.50) postpaid

**Yellow Fleshed Columbus** To all external appearances it is like the green fleshed variety, but its cross with the Tip Top adds flavor to its good keeping qualities, making it a good market melon. Its heavy netting, thick yellow flesh of excellent flavor makes it a very desirable all round melon. (Pkt. 10c) (oz. 30c) (¼ lb. \$1.00) (lb. \$3.00) postpaid.



Irondequoit (Improved Tip Top)

**Irondequoit** This excellent melon originated in Irondequoit, New York; hence its name. It is as popular in New York City as the Tip-top is in Los Angeles. We sent to Irondequoit and purchased some pedigreed seed from the original introducer and now offer you the pure strain.

This melon may well be called the Improved Tip-top, for that is what it is. The appearance is similar except the netting which is heavier; it is more solid and less prone to split. The average size is slightly larger; the flesh is yellow and the flavor unsurpassed. It is an ideal melon for the peddler or the cafeteria. It is neither too large nor too small. (Pkt. 10c) (oz. 25c) (¼ lb. 85c) (lb. \$2.50) postpaid.

# A & M Watermelons

See Leguminous Crops  
for Green Manure.

Write United States Department of Agriculture, Bureau of Plant Industry, Washington, D. C. and ask for "Farmer's Bulletin No. 821," Watermelon Culture.

**Culture**—Plant the seed in a furrow, dropping ten seeds every eight or ten feet apart; cover about one inch. As the vines grow, hill the earth about them until the roots are from ten to twelve inches deep. When the vines are safely established, thin out, leaving only two vines to the hill. It is a good plan to establish your rows by throwing the soil toward the center, with two rounds of plowing, and cultivate every week during the early growth of the plants. This gives deep cultivation at the time it is needed, mulches the soil properly, makes proper rows slightly raised in the center, allowing a low place between for irrigating. Be sure to cultivate after each irrigation, as soon as the nature of the soil will permit. If these instructions are carefully followed you will have thrifty vines throughout the season.

## Our Selected Melon Seed

Owing to our extensive trade with large melon growers and associations, we exercise every precaution possible to secure the best type of melons. Having the best seed obtainable we grow our melons under our own supervision. Our seed fields proved the wisdom of this method, for they showed the highest percent of perfect melons.

The fields are widely separated, so that there is no cross-pollination. The melons are to all appearances practically true to type. Our Superintendent understands his business and is conscientious, knowing the importance of his responsibility. I am sure this year's seed will maintain our record of high-standing among melon growers.

Many growers who planted our Klondike Melon last year have already placed their order for 1925 season, asking for the same good seed.

Many large melon growers are now using the Segment Corn Planter, particularly for replanting—it does the work better. Price \$2.00 f. o. b. here. Wt. 5 lbs.

## THE KLONDIKE

The Prince of all Watermelons

The melon that took first prize at the State Fair Sacramento Also at the Los Angeles County Fair at Pomona



A & M Klondike

We first offered the Klondike watermelon in 1909. It gained in popularity each year, first in one market then another. On account of the thin rind and extreme crispness the shipper was slow to accept it. But its extreme popularity impelled the shipper to grow it. Each year a larger acreage was planted, bringing greater profit to the grower. Although having a very thin rind it is a better shipper because it does not wilt.

We now feel that the Klondike has fairly won the title, "The Prince of all Watermelons."

It was discovered as a sport by Dr. George P. Clements, Secretary of the Agricultural Department of the Los Angeles Chamber of Commerce. It was introduced by us and we kept it pure to the original type.

The seed is small. One pound of Klondike will number as many seeds as two pounds of other varieties. The color of the seed is brown, mottled black. (Pkt. 10c) (oz. 25c) (¼ lb. 85c) (lb. \$2.50) postpaid.

## FOR ALL KINDS OF MELONS

**FOR APHIS**—First keep the vines hardy by deep planting and proper cultivation, irrigation and fertilizing. Then if the aphid appears, which is unlikely, spray with Nico-Dust, or bury the affected part with dust. Either way is a constant fight. Lady bugs in some instances are destroying the aphid very satisfactorily.

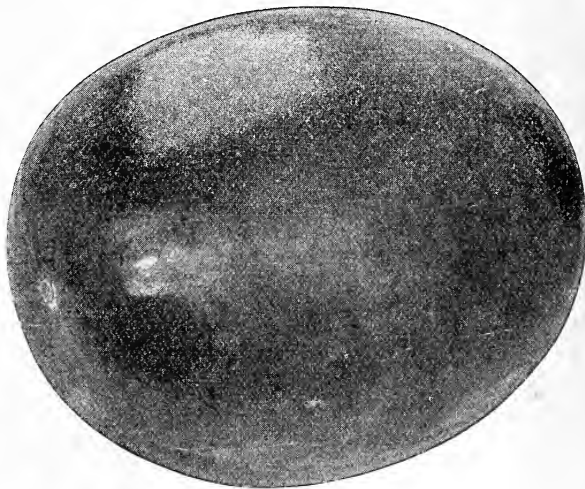
**FOR MELON BLIGHT** that is caused by a fungus at the root, spray the hill freely with Bordeaux so that the liquid will follow the stem several inches beneath the surface. This should be done as a precaution rather than as a remedy.

**READ THIS.** If you would prolong the life of your vines, make a path between the rows by training the vines to grow along the rows and not across from one row to the other. Then at picking time do not allow the pickers to tread upon the vines. To do so makes many culls and shortens the life of the vines and lessens your profit about one-third.

For a good yield of melons grow a crop of *Melilotus indica* during the winter. Plow under during February; broadcast two sacks of each of Toro Sulphur and lime. This is a precaution against blight and will fertilize your field as nothing else will do.

## ANGELENO

THE MELON FOR THE SHIPPER



A & M. Black-seeded Angeleno

**Black Seeded Angeleno** This is another triumph for Aggeler and Musser Seed Company. The original Angeleno had white seed. The cafeteria managers said their trade required a black seeded melon because they knew that when the seed was black the melon was ripe.

We hybridized the Angeleno with Black Seeded Chilian and got the desired results the first season. It required but two years more to perfect the type. The flavor was also improved. It at once became a favorite with shippers.

**As a shipper** it is extraordinary because it rarely breaks, even supporting the weight of a man weighing 170 pounds. A carload will average in weight from 25 to 30 pounds to the melon.

It is like the original Angeleno in shape and appearance except the stripe of the Chilian is sometimes apparent. (Pkt. 10c) (oz. 20c) (¼ lb. 65c) (lb. \$2.00) postpaid.

**White Seeded Angeleno** The most attractive in appearance of all watermelons—its large size, beautiful dark green rind with a tinge of gold showing through the green. No other variety compares with the Angeleno in its bright red flesh, red to the rind, and entirely free from fibre, simply melts. If the picker will observe the gold showing through the green as soon as it is ripe, he need never pick an unripe melon. (Pkt. 10c) (oz. 20c) (¼ lb. 50c) (lb. \$1.50) postpaid.

**Chilian** For twenty-five years the leading melon and is as popular today as at any time, and is likely to continue its popularity for many years to come. Its thin rind and delicious flavor commend it to the consumer, but its good shipping and selling qualities make it a favorite with the grower and dealer. It is very prolific and just a desirable size for the peddler to handle, and every melon is a good one.

# A & M Watermelons—Continued

**White Seeded Chilian** Preferred because of its large average size. (Pkt. 10c) (oz. 20c) (¼ lb. 50c) (lb. \$1.50) postpaid.

**Black Seeded Chilian** Preferred because of its earliness, short crop and black seed, which gives it preference at restaurants, hotels and cafeterias. (Pkt. 10c) (oz. 20c) (¼ lb. 50c) (lb. \$1.50) postpaid.

All Chilians are good regardless of the color of the seed, but the Black Seeded one is planted for early crop.

**Tom Watson** has for several seasons been the most popular melon in the South. Its shape is similar to the Kleckley Sweet, but the color is a lighter green. Its great merit is in its earliness, good flavor, thin rind, and good keeping qualities, making it one of the best of shippers. (Pkt. 10c) (oz. 20c) (¼ lb. 50c) (lb. \$1.50) postpaid.

**Kleckley Sweet** This is an excellent melon either for the home garden or for shipping. It is of medium size, a very green rind, with deep red flesh of delicious flavor. (Pkt. 10c) (oz. 20c) (¼ lb. 40c) (lb. \$1.25) postpaid.

**Excel** To the grower and shipper who wants a large melon the Excel fills the bill. It is oblong, dark green with a suspicion of a stripe, and will average 35 lbs. and is of excellent flavor. It is a good shipper and has maintained its popularity for many years. Our seed is from our own growing and is true to type. (Pkt. 10c) (oz. 20c) (¼ lb. 50c) (lb. \$1.50) postpaid.

**Irish Gray** The introducer describes it as follows: "The color of the rind is yellowish grey, resembling a variety of Citron. It will keep in good condition for a long time after being taken from the vine, and stand long distance shipping better than any other melon. The flesh is bright, sparkling red, very sweet and firm. As a home market melon it is unsurpassed. (Pkt. 10c) (oz. 20c) (¼ lb. 65c) (lb. \$2.00) postpaid.

**Florida Favorite** This melon is very popular with shippers, because of its extreme earliness, and all round good qualities as a good shipper. In appearance it is similar to the Rattlesnake, the rind being considerably darker. (Pkt. 10c) (oz. 20c) (¼ lb. 40c) (lb. \$1.25) postpaid.

**Peerless** Also called Red-fleshed Ice Cream. This is the melon that proved so popular in Oregon and Idaho. It is early, a good shipper and a delicious melon. (Pkt. 10c) (oz. 20c) (¼ lb. 50c) (lb. \$1.50) postpaid.

**Rattlesnake** Has long been a popular melon with shippers. It is a long melon, having a white rind, with dark green stripes. Flesh of excellent flavor. (Pkt. 10c) (oz. 20c) (¼ lb. 40c) (lb. \$1.25) postpaid.

## Yellow-Fleshed Ice Cream

This melon grows a very large size, is long in shape and the rind an even dark green. In quality it is simply delicious, sugary and of a rich flavor peculiar to itself. (Pkt. 10c) (oz. 20c) (¼ lb. 50c) (lb. \$1.50) postpaid.



A & M Winter Melon, also King and Queen

**Winter Melon** This new melon is slowly but surely forcing itself into favor because of the many good qualities which are not apparent at first acquaintance. The Winter Melon might easily be mistaken for a small white citron and the dealer must be convinced, they in turn must convert customers to the knowledge that the Winter Melon is a thing of great luxury. It is late to mature; very light in color with a suspicion of a stripe; size 10 inches in diameter; seed small shiny black, flesh pink, solid and stringless. The flavor when cold is sweet, crisp and surprisingly delicious, and when you have finished you realize that you have eaten a melon as entirely distinct from a water melon, as the Casaba is apart from the Cantaloupe and just as delicious. Like the Casaba it should not be eaten right off the vine, but be allowed to lie around until the first signs of decay. It decays slowly like an apple, not like other watermelons. (Pkt. 10c) (oz. 35c) (¼ lb. \$1.00) (lb. \$3.00) postpaid.

"The Winter Melon is a winner. They keep well and taste good. It is also known as King and Queen, also Cocoanut CHRIS PASEIL, San Diego County. Melon."

## Citron Large Green Striped

Weights from thirty to sixty pounds. Is better than pumpkin for stock. Allowed to lay in field or piled in the barnyard will not be damaged by frost nor decay until the following summer. (Pkt. 10c) (oz. 20c) (¼ lb. 35c) (lb. \$1.00) postpaid.

**Preserving Citron** Red Seeded, small round melon. This melon with a proper portion of lemon makes an excellent preserve that is as good as marmalade. (Pkt. 10c) (oz. 20c) (¼ lb. 40c) (lb. \$1.25) postpaid.

If you have any soil too sandy to grow the usual crops, plant the large green striped citron, you will be sure of a big crop.

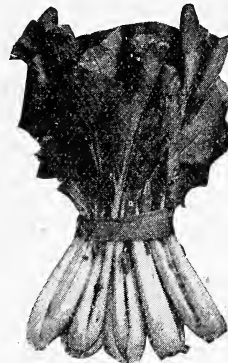
## Formula for Cutworm and Grasshopper Poison for Five Acres

Paris green (or white arsenic).....	1 lb.
Molasses (cheap blackstrap preferably).....	2 qts.
Lemons (or oranges).....	½ doz.
Water.....	4 gals.
Brans (or alfalfa meal).....	25 lbs.

Grind lemons with meat grinder, mix all ingredients thoroughly. Spread thinly to avoid danger to livestock.

Best spread in late afternoon.

# A & M Mustard



Chinese White Mustard

## Yellow Seeded

The seed is used extensively for spicing, pickling and other culinary and medicinal purposes. The young plants make delicious greens. (Pkt. 10c) (oz. 20c) (lb. 50c) postpaid.

## Southern Giant

The true curled-leaf variety so popular in the South for planting in the fall. (Pkt. 10c) (oz. 20c) (¼ lb. 40c) (lb. \$1.25) postpaid.

## Ostrich Plume

Is delicious as well as ornamental; the leaves resemble ostrich plumes, hence the name. (Pkt. 10c) (oz. 20c) (¼ lb. 50c) (lb. 1.50) postpaid.

**Chinese White** This is a delicious vegetable and savors strongly of Brussels Sprouts, being less pungent than the American varieties. It is greatly relished by the Orientals, and can be seen all the year 'round at vegetable stands kept by the Japanese and Chinese. (Pkt. 10c) (oz. 40c) (¼ lb. \$1.35) (lb. \$4.00) postpaid.

**Chinese Green** This is an Oriental vegetable, and like the White Mustard, is grown all the year 'round, but like our American Spinach, thrives best in the winter season. (Pkt. 10c) (oz. 40c) (¼ lb. \$1.35) (lb. \$4.00) postpaid.

# A & M Mushrooms

One of the most profitable crops for the outlay that can be grown. The market is sure, because the supply never equals the demand. Mushrooms can be grown in any dark room or cellar where the temperature can be kept at 50 to 75 degrees. The main conditions in mushroom growing are proper and uniform temperature, and very rich soil. One pound of spawn is sufficient for a bed 2x8 feet. We have the very best spawn obtainable. If interested, write for circular.

**Pure Culture Spawn—Brandywine**—Put up in bricks. (Per brick 4c) (5 bricks \$1.75) prepaid.

Many inquiries come to us from would-be growers of mushrooms. Our reply is not always encouraging because many growers have marvelous success for a time, but we know of not one permanently prosperous grower. There seems to be an element of uncertainty.

If you have a favorable spot on your place, try it.

## CLEANING AND RE-CLEANING SEEDS

We have the most complete and best equipment in the city for cleaning and re-cleaning seeds of all kinds and of every description. Every employee connected with the house has instructions to see to it that no unclean seed is allowed to pass. Therefore we request you to report to us any violation of these instructions.

# A & M Onions

See Fertilizers

Write U. S. Dept. of Agriculture, Washington, D. C., ask for Farmers Bulletin No. 1007, "Control of the Onion Thrips."



A & M Riverside Sweet Spanish. Six Onions, one yard.  
Weight 26½ lbs.

**Culture.**—No crop is so liable to variations by cultivation and soil as the onion. Having rich soil with too much irrigation will produce thick-necked scallions, while the same soil, well drained, would produce the finest onions. A sandy loam well fertilized is best.

No vegetable is so sensitive to variations of climate as the onion. It is of utmost importance that the right variety is selected for each month in the year, and for your particular climatic conditions.

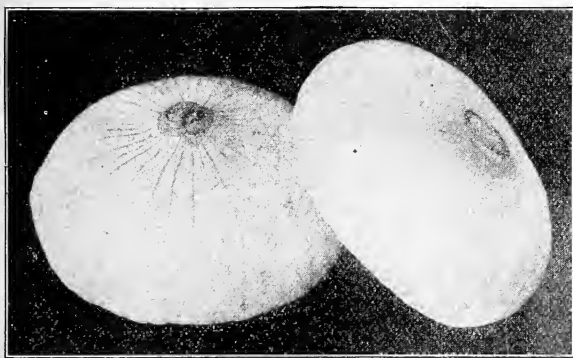
Irrigate in the furrow between the ridges to avoid flooding the onion, which causes the onion to rot readily, rendering it unfit to ship or to keep.

To succeed in growing onions it is highly important to make a proper selection of seed suitable to the time of planting. West of the Coast Range plant the Queen variety in August and September. They will then attain marketable size in March and April. East of the Coast Range, where the temperature is more uniform, as in Coachella and Imperial Valleys, plant the Crystal Wax or Bermuda onion in September. We advise planting all other varieties from October until March, selected according to the market in which they are to be sold, and the facilities for irrigating.

The White Australian should prove popular because of the good keeping qualities.

Three pounds of seed are required to plant one acre for dry mature onions. One ounce will plant one hundred feet of row. For bunching onions, plant one-fourth pound of seed to 100 feet of row or 10 lbs. per acre.

We claim our onion seed to be the highest type as to germination and purity. When you wish to plant onions consult us as to when, how and what variety to plant. For early local trade plant New Queen.



**Extra Early White Queen** This is by far the earliest and best onion to grow in Southern California. Planted during August and September it attains marketable size in March and April and is sold on the local market as early as the Bermuda. Local growers market them while quite young, cutting the top off close to the onion. They harvest only what can be sold from day to day.

This practice is very profitable for the reason you are selling a green onion at the price of the early dry onion.

**White Portugal, or Silverskin** A good second onion to follow the Extra Early White Queen. It should be planted any time from November 1st until April 1st. It is a good keeper and desired for shipping. It has long been a favorite, and probably no other variety is more generally popular with growers throughout the United States. Under good cultivation the average diameter is from four to six inches. The thick skin is a clear silvery white, flesh snow-white, sweet and tender. (Pkt. 10c) (oz. 40c) (¼ lb. \$1.35) (lb. \$4.00) postpaid.

Large Onions are now the style. This has been brought about by the introduction of

## The A & M Riverside Sweet Spanish

(The most popular onion on the local market)

We have no sets of this variety

Very large, light yellow, globe shaped, small top, good shipper.

This Onion was brought from Spain several years ago. A small acreage was grown, the product of which was sold at the stores of Riverside, California. The unusual mildness and excellent flavor made this onion popular at once. A larger acreage was grown and the popularity broadened until the onion is in demand in Portland, Oregon, Chicago and as far east as Detroit, Michigan.

It is a good keeper and not prone to smut; we do not say it is immune, but the grower gives the following directions for curing and keeping this onion, and if followed there is little likelihood of smut.

Plant in December or January. It will mature in September when there is no danger from sun scald. Allow the onion to thoroughly mature until the tops have fallen and dried.

Then pull the onions and allow them to remain in the field in rows well covered with the tops, which after a week of favorable weather become as dry as chaff. The tops are then rubbed off and the onion put in crates and stacked loosely in a shaded but well ventilated place. After four to six weeks the onion is so thoroughly cured it may be safely shipped to any city within the United States.

It will be very profitable to the grower who will plant this onion.

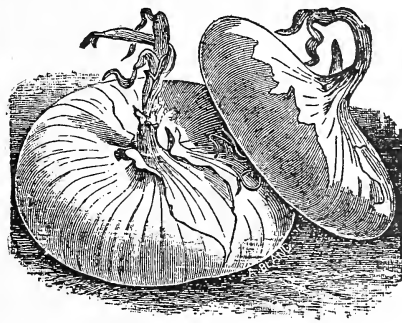
To obtain the highest price, this variety should be planted about February 1st; they will then mature about August 1st, and if the prevailing price is too low put them in cold storage. (Pkt. 10c) (oz. \$1.00) (¼ lb. \$3.50) (lb. \$10.00) postpaid.

## Crystal Wax and Yellow Bermuda

These two varieties go hand in hand; they require the same climate and culture; where one thrives the other also thrives. They mature at the same time and bring about the same price on the market.

The Crystal Wax is a medium sized pure waxy white onion. The Yellow Bermuda is about the same size as the Crystal Wax, but a yellow straw color.

These are the varieties that are grown in Southern



Crystal Wax Onion

Texas and in Coachella and Imperial Valleys to the exclusion of every other variety. Why? Because they are adapted to that climate; because when planted the latter part of September they mature in March and April, just when the market is bare and the price is highest. Onion growers are satisfied with 300 crates per acre, and 25% off color. Our seed produces 500 to 800 crates per acre, with less than 1% off color.

**Crystal Wax** (Pkt. 10c) (oz. 50c) (¼ lb. \$1.65) lb. \$5.00 postpaid.

**Yellow Bermuda** (Pkt. 10c) (oz. 40c) (¼ lb. \$1.35) (lb. \$4.00) postpaid.

# A & M Onions—Continued

## Southport White Globe

This onion now easily leads all other varieties in popularity on the Los Angeles market and is selling more readily and at higher prices. It is a good keeper, either in the field or in cold storage. It is a silvery white in color, globe shaped, and of delicious flavor. It is the popular onion with the shipper. (Pkt. 10c) (oz. 40c) (¼ lb. \$1.35) (lb. \$4.00) postpaid.

## Yellow Globe Danvers

This onion is the standard winter sort in many markets. The shape is almost globe form and the bulbs are quite large with thin necks. The skin is a straw yellow, while the flesh is pure white, solid and of good quality. Its earliness makes it valuable for market. The crop is very uniform and ripens at one time. (Pkt. 10c) (oz. 25c) (¼ lb. 80c) (lb. \$2.50) postpaid.

## Red Wethersfield

Probably the most popular red onion, and the one grown more largely throughout the United States than any other. It is a large medium flat onion of excellent mild flavor. (Pkt. 10c) (oz. 25c) (¼ lb. 85c) (lb. \$2.50) postpaid.

## Australian Brown

Quick to mature; a good keeper; solid and heavy; an excellent onion for shipping. The skin is a light brown. Its solidity gives it great weight and a sack weighs several pounds heavier than a sack of other varieties. The onions are thin-necked and ripen very early in all soils. As the plant makes a very quick growth it matures the bulbs before the hot, dry summer weather sets in, and this in connection with the exceptional keeping qualities makes it a most profitable variety. (Pkt. 10c) (oz. 20c) (¼ lb. 60c) (lb. \$1.75) postpaid.

## Red Bermuda

In shape, like the White Bermuda, color a pale red.

Planted during January matures latter part of June. No other onion is ready for use so quickly after planting seed. It is the right onion for the home garden. (Pkt. 10c) (oz. 30c) (¼ lb. \$1.00) (lb. \$3.00) postpaid.

## Prizetaker

A large Yellow Globe Onion of finest flavor, handsome shape and enormous size, many single onions having been raised to weigh three pounds or over. The Prizetaker grows always to a perfect globe shape with a bright straw color. (Pkt. 10c) (oz. 25c) (¼ lb. 85c) (lb. \$2.50) postpaid.

## A & M Onion Sets

The earliest onions are grown from sets planted in September. This brings them in the market in February and March, when prices are highest. About 250 lbs. of sets will plant one acre.

We have sets only in two varieties. The White Portugal and the Yellow Globe Danver. Therefore state whether you wish white sets or yellow.

We have no sets of the Riverside Sweet Spanish.

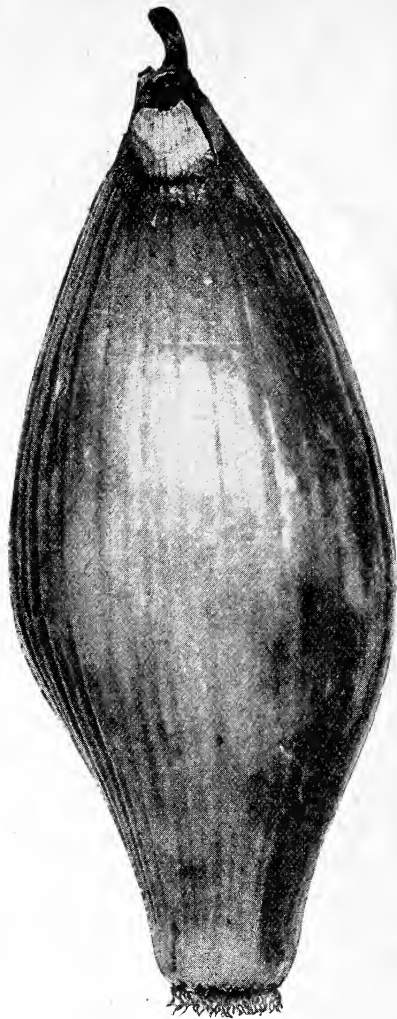
For the home garden no vegetable is so valuable as the onion, and for this purpose it is better to plant sets, because they are ready for the table six weeks after planting. Set them three inches apart in rows six inches apart. When ready for use, take up every other one as needed, allowing the balance to grow to mature size. One pound of sets will plant about fifty feet of row. (Lb. 40c) postpaid) (10 lbs. \$3.50 postpaid). For larger quantities write for prices.

## A & M GARLIC

Cultural Instructions from a Professional Grower—"I am of the opinion that it would take 250 lbs. to plant an acre of Garlic. I make my rows two feet apart; make double rows, the garlic about four inches apart in the rows each way. I believe in good soil; I can raise between four or five tons per acre. Weeds must never grow in garlic, and it needs plenty of water regularly. If you leave it suffer either for water or cultivation it matures before good size. Garlic planted October 2nd, matured May 7th. The Large White Garlic planted the same time matured in June.

Market—The demand for garlic is limited but insistent and the price has a wide range, from 5c per lb. to 50c per lb. (Per lb. 40c) (10 lbs. \$3.50) postpaid.

## ITALIAN RED BOTTLE ONION



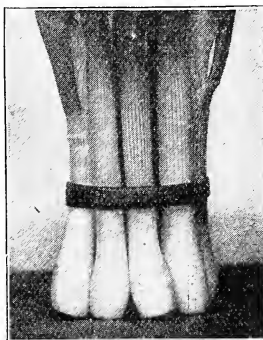
Italian Red Bottle Onion

## The Italian Red Bottle

Onion is as popular in some sections of Northern California as is the Sweet Spanish Onion in Southern California. It grows as large, weighing 3 to 4 pounds and has a similar sweet, non-pungent flavor.

Whether you grow for the local market or in the home garden, you will make no mistake to plant this onion. Any consumer who once having eaten them will want more. (Pkt. 10c) (oz. \$1.00) (¼ lb. \$3.00) (lb. \$9.00).

## Bunching Onion



Many think any white onion will do for a bunching onion, but this is not true. Our growers for fancy trade have learned that we have the best strain of seed for this purpose, and our sales amount to thousands of lbs. each year. The picture shows a sample of what our seeds produce. They are just the right shape. (Pkt. 10c) (oz. 35c) (¼ lb. \$1.20) (lb. \$3.50) postpaid.



The proper way to grow Onions is on ridges

Bunching Onions

# A & M Garden Peas

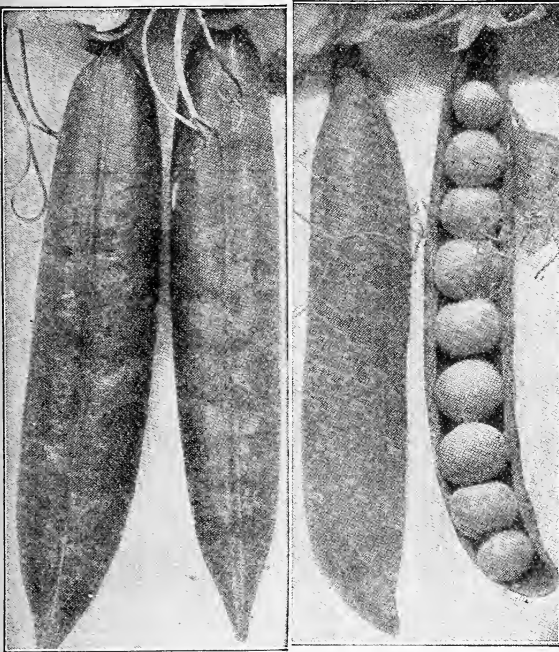
Write for quantity prices on all varieties.

## Garden Peas Easy to Start and Grow

In planting garden peas in the home garden, first prepare the soil the same as for other crops, then scatter a little fertilizer where the row is to be planted, and rake this into the soil. Next stretch a line and make a deep mark with the corner of the hoe. The bottom of this mark should be at least two inches across so that the seed can be spread somewhat, and not crowded too closely together. Scatter the seed in this furrow, ten seeds to the foot, then cover about one inch deep and slightly firm the soil over the seed with the back of the hoe. About one week will generally elapse before the sprout appears above the ground.

At least three, and preferably four, plantings should be made at intervals of two weeks, in order to keep up a continuous supply.

There is nothing particularly difficult about the cultivation of peas—just keep them well hoed, and properly trained upon some kind of trellis.



Dwarf Telephone

Admiral

**ADVICE:** For the home garden we recommend Nott's Excelsior, to be planted for very early peas, the Tall Telephone for later crop. Any other of the late varieties offered here are good.

Culture—Peas are very susceptible to soil and climate. Within the radius of a few miles of Los Angeles, and in one locality or another peas may be grown every month of the year.

In a thermal zone plant peas from September 1st to February 1st, and in lowlands from January 1st to September 1st. In summer months, from May to September, plant two inches deep in heavy soil and deeper in sandy soil. From December to April plant not more than one inch deep. The object of this is to have the seed deep enough to lie in the moist earth, and shallow enough to get warmth from the sun. Never irrigate after planting peas until they come up. Irrigate before planting, but do not plant until the soil is tillable.

Peas will rot in soil that is too wet, especially during the winter months. They will stand a great deal of frost and cold weather until they bloom, but after they bloom a heavy frost will destroy the pods, and if cold enough, will kill the vines. Many planters sow one hundred pounds of seed per acre, but fifty pounds of seed per acre drilled in rows and well cultivated will produce larger pods and more peas per acre; besides, there will be less mildew. Put the rows north and south for winter planting to give them as much sun as possible. At the first appearance of mildew spray with the best sulphur obtainable, and do the spraying in the morning. If your soil is sandy it would be well to inoculate the seed with Mulford Culture.

**Stratagem** A favorite in the San Francisco markets. The pods are of a dark green color and remain firm several days after picking. A very strong grower; very prolific, pods of good size and well filled. Vines stand upright about 2½ feet; an excellent variety.

Owing to the scarcity of the Dwarf Telephone for several years the Stratagem was established and it was then discovered to be a better shipper. Its dark green color made it a good seller in the Eastern markets.

(Pkt. 10c) (½ lb. 20c) (lb. 35c) (10 lbs. \$3.00) prepaid.

## A & M Perfection Peas

During the past season this proved to be one of the most popular peas among market gardeners. The vines are vigorous and produce 25% more peas than the ordinary early varieties. Pods are large and well filled with tender, sweet peas of excellent flavor. May be planted during the winter months or early spring. What is good for the market gardener is certainly good for the home garden, therefore we recommend A & M Perfection for both. (Pkt. 10c) (½ lb. 25c) (lb. 40c) (10 lbs. \$3.50) prepaid.

**Admiral or Senator** This excellent variety was introduced locally several years ago with only a limited quantity to offer. Every grower who was fortunate enough to get some was extremely pleased at his good fortune. Has dark green foliage, profusely branching vines bearing abundantly of large, well-filled pods of delicious sweet peas that mature in twelve weeks from planting. The picture is of pods grown on our trial grounds, and shows the shape and actual size of the pod. It has had five years' trial and every gardener that once grows it wants it again. That is the best recommendation.

(Pkt. 10c) (½ lb. 20c) (lb. 35c) (10 lbs. \$3.00) prepaid.

**Tall Telephone** Vines vigorous, growing about 4 feet high, with large, coarse, light-colored leaves and producing an abundance of very large pods filled with immense peas which are tender, sweet, and of excellent flavor. Throughout the south and by some growers in California it is preferred to all other varieties because of the hardness of the vines and its large, well-filled pods, making it one of the best varieties to grow during the winter months for shipping.

(Pkt. 10c) (½ lb. 20c) (lb. 35c) (10 lbs. \$3.00) prepaid.

**Laxtonian** A long time English favorite. Any variety that can hold its popularity for so long a time must indeed be a good pea. For your home garden you can plant no better. It matures within eight weeks.

(Pkt. 10c) (½ lb. 20c) (lb. 35c) (10 lbs. \$3.00) prepaid.

**Dwarf Telephone** Medium tall; pods very large; medium green peas, very sweet; a favorite with shippers probably because it carries well and commands a high price because of quality.

For years this variety was grown more extensively for shipping than any other.

(Pkt. 10c) (½ lb. 20c) (lb. 35c) (10 lbs. \$3.00) prepaid.

**Gradus** The largest of all extra early varieties; medium tall; quality superior to all other varieties.

(Pkt. 10c) (½ lb. 20c) (lb. 35c) (10 lbs. \$3.00) prepaid.

**Dwarf Gray Sugar** (Edible pods.) Of extraordinary yielding qualities, and unsurpassed as an edible-pod variety.

(Pkt. 10c) (½ lb. 20c) (lb. 35c) (10 lbs. \$3.00) prepaid.

**Tall Gray Sugar** (Edible Pods) Every family garden should have a row of these delicious peas. Prepare and cook same as string beans. They are sweet and delicious. They yield enormously. (Pkt. 10c) (½ lb. 20c) postpaid.

**Little Gem** Is a very desirable, extra early, dwarf, wrinkled variety, growing about 15 inches high. Very large, sweet, and of delicious flavor. (Per Pkt. 10c) (½ lb. 20c) (lb. 35c) (10 lbs. \$3.00) prepaid.

**American Wonder** The earliest of all wrinkled peas. Of dwarf habit, growing from 9 to 11 inches high, and producing a profusion of good-sized and well-filled pods of the finest flavor.

(Pkt. 10c) (½ lb. 20c) (lb. 35c) (10 lbs. \$3.00) prepaid.

**Nott's Excelsior** Although a few days later than the American Wonder, the pods will average fully one-third larger, containing 6 to 8 large peas, so closely packed together that they become flattened.

(Pkt. 10c) (½ lb. 20c) (lb. 35c) (10 lbs. \$3.00) prepaid.

**Yorkshire Hero** A very popular market pea in this section. Abundant cropper and excellent in quality. Height 2½ feet.

(Pkt. 10c) (½ lb. 20c) (lb. 35c) (10 lbs. \$3.00) prepaid.

Notice all prices quoted on this page are prepaid.

The wonderful growth and present magnitude of the California Vegetable industry is a matter of surprise to all who are not thoroughly familiar with the statistics of production. The rich soil, the abundance of irrigation water, and above all, the superior climate, combine to give California growers special advantages in the production of vegetables for the big consuming markets the country over.

California produces more asparagus, more artichokes, more cantaloupes, more cauliflower, more lettuce, more late onions than any other State. Its shipments of mixed vegetables are larger than the shipments from any other state. It also ranks among the largest producers of celery, potatoes, tomatoes, cabbage, casabas, peppers and peas.



White Velvet

## A & M Okra

A good and healthful vegetable for a summer crop.

Culture—Plant seed from April 1st until Aug. 15th. Plant six to ten inches apart in rows three feet apart. One ounce will plant one hundred feet of row.

## A. & M. Early Greenpod

We have for a long time endeavored to produce an okra that is earlier than the White Velvet, which has long been the popular market variety. We have succeeded by selection, in producing not only an earlier variety, but a much more tender and prolific okra, and have named it Aggeler & Mussey's Early Greenpod.

It is just the thing for truckers in the Coachella and Imperial Valleys, because it matures in April, fully a month ahead of other varieties; bears continuously until late in the season.

The pods are three to four inches long, deep green in color, and when young are absolutely stringless.

Every early trucker should have this variety. (Pkt. 10c) (oz. 20c) (¼ lb. 45c) (lb. \$1.25) postpaid.

## White Velvet

On account of its attractive white color, good flavor and tender pods when quite young, it has long been a favorite variety. (Pkt. 10c) (oz. 20c) (¼ lb. 45c) (lb. \$1.25) postpaid.

**Mammoth Long Pod** We have greatly improved the original strain and now its productiveness is simply wonderful, the pods shooting out from the bottom of the stalk within three inches of the ground, and the whole plant is covered with them to the height of a man's head, five or six feet. Pods are an intense green in color, of unusual length, nine or ten inches, tender, and of good flavor. (Pkt. 10c) (oz. 20c) (¼ lb. 45c) (lb. \$1.25) postpaid.

## CHINESE OKRA

Chinese Okra  
(Sin gwa)

This grows on a vine somewhat similar to a watermelon vine. It may be trained to grow on a trellis from which the fruit will hang like a gourd. The fruit may be cooked and served in every way that Okra is served. It should be peeled before cooking. If you are fond of okra, be sure to plant some of this in your garden. Plant about May 1st about the same as cucumbers. (Pkt. 10c) (oz. 30c)

## A & M Parsley

Culture—Same as lettuce.

**Plain or Smooth-leaved** This variety has a richer parsley flavor than the curled varieties and should be preferred for the home garden. It is not profitable to the market gardener for the reason that the curled variety will produce much more per acre. (Pkt. 10c) (oz. 20c) (¼ lb. 50c) (lb. \$1.50) postpaid.

**Champion Moss Curled** Extra dark. Leaves are crimped and curled, giving a most beautiful decorative appearance. (Pkt. 10c) (oz. 20c) (¼ lb. 60c) (lb. \$1.75) postpaid.

**Extra Double Curled** A good curled variety for garnishing. (Pkt. 10c) (oz. 20c) (¼ lb. 60c) (lb. \$1.75) postpaid.

**Hamburg Turnip Rooted** Fleshy vegetable roots for soups, etc. (Pkt. 10c) (oz. 20c) (¼ lb. 60c) (lb. \$1.75) postpaid.

Lettuce, bean leaves and onions contain "glucokinin," a substance similar to the recently discovered insulin. Prof. J. J. Wilaman of the University of Minnesota, is given as authority for the announcement that the new substance may prove "even more valuable as a cure for diabetes." If the new discovery is all that scientists believe, instead of using insulin, sufferers may simply eat lettuce or onions or an infusion of bean leaves until danger is overcome and complete health restored by well balanced diet.

## A & M Parsnips

### Our New French Parsnip

Just right for the market gardener. The picture shows the actual size at time of marketing. It grows slightly larger, but it attains this size in ninety days, which is a full month earlier than other varieties. It is crisp and succulent. It will at once supersede all other varieties because of its all-round desirability. (Pkt. 10c) (oz. 30c) (¼ lb. \$1.00) (lb. 3.00) postpaid.

A & M  
Parsnip

### A & M Devonshire

This Parsnip was recommended to us by our European growers. It is scarcely more than half as long as the Hollow Crown, but it is often three inches in diameter. Tender and has an excellent flavor. (Pkt. 10c) (oz. 30c) (¼ lb. \$1.00) (lb. \$3.00) postpaid.

### A & M Hollow Crown

This is the favorite home garden sort to grow in a very mellow soil because it frequently grows two feet long, is very tender and has a particularly good flavor. (Pkt. 10c) (oz. 30c) (¼ lb. \$1.00) (lb. \$3.00) postpaid.

## A & M Peanuts

Write Department of Agriculture, Washington, D. C., ask for Farmers' Bulletin 1127

**READ**—The Peanut is too much neglected. Its various uses are of great economic value. Its value as a food is well known, but few ranchers realize its value as a soil renovator, adding humus and nitrogen. As hog food, there is nothing better. The straw is rich in food value and may be pastured green, cured as hay or ensilage, and the yield of hay is often from two or more tons per acre. It grows on soil that may be too sandy for other crops. Therefore, if you have sandy soil, make it valuable by planting peanuts.

**MARKET**—There are a number of factories making Peanut Butter and by-products. It is here you can always find a buyer.

Reclaim poor sandy soil with peanuts.

Give an application of lime 500 lbs. per acre, and Toro sulphur 200 lbs. per acre.

**Virginia Improved** This variety is much superior to the ordinary Peanut, yielding fewer imperfect pods and combining earliness, productiveness and size; yields on ordinary land about 40 sacks to the acre. (Lb. 30c) (10 lbs. \$2.50) postpaid. Write for quantity price.

**Spanish Hulled** This is the small Round Peanut used so largely in confectionery lines. One would suppose that on account of the small size it would be unprofitable to grow. But not so. Mr. Moore, residing on the Laguna Ranch, says it is more profitable to the grower than the Georgia because it is enormously prolific, and grows in a compact bunch on a small vine so that they may be stripped easily by pulling the entire stalk through the hand instead of picking one by one. This advantage, together with the ready sale at a higher price, makes the small Spanish Peanut more profitable than the Georgia. (lb. 35c) (10 lbs. \$3.00) postpaid. Write for quantity price.

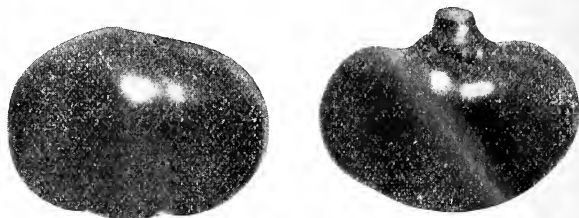
Do not fail to read all sub-notes, in them you may find much valuable information.

You will find a reliable Garden Calendar on inside back cover.

# A & M Peppers

**Anaheim Chili Pepper** Anaheim Chili is desired above all others for culinary use because of its agreeable pungency. Other pungent varieties are intolerable, not so with the Anaheim Chili. That is what makes it the best seller in the market and the best pungent variety for canning. (Pkt. 10c) (oz. 50c) (¼ lb. \$1.65) (lb. \$5.00) postpaid.

## THE SALAD PIMENTO



Salad Pepper

In our 1923 catalog under the headline "Progress" we made the statement that "The canner can now say to the grower, 'We want a vegetable with certain shape, size, flavor, firmness and color,' and in due time it will be produced."

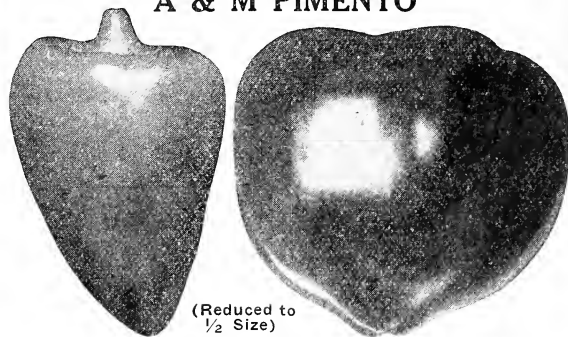
During 1920 we had just such an order for a certain type of pepper.

In 1923 we delivered to the Sylmar Packing Corporation the Salad Pepper conforming in every detail to their order.

What we offer this season has been grown from this pure seed. We have named it the Salad Pimento because it has the thick, firm meat, mild flavor, bright red color of the pimento but more flat, perfectly smooth from stem to blossom. Uniformly smaller size of 1½ inches to 2 inches in diameter, just right to put into the jar for which it was created. (Pkt. 10c) (oz. 75c) (¼ lb. \$2.50) (lb. \$8.00) postpaid.

**Cayenne** A long, slim pepper, rather pointed, and when ripe, a bright red color. Extremely pungent. (Pkt. 10c) (oz. 80c) (¼ lb. \$2.65) (lb. \$8.00) postpaid.

## A & M PIMENTO



(Reduced to ½ Size)

As We Imported it in 1906.

As We Improved it  
A Big Money Maker.

"OUR SEED IS PURE." Owing to the large acreage planted to Chili, the Pimento growers who planted seed of their own growing found their peppers badly hybridized with chili, resulting in a product that was ill-shaped and pungent, therefore could not be sold on the market nor to the canner. Our seed is pure and true to type, as one large grower testified by ordering his seed from us, discarding his own. He said: "I shall hereafter depend upon you for my seed, because it is the purest I have ever planted."

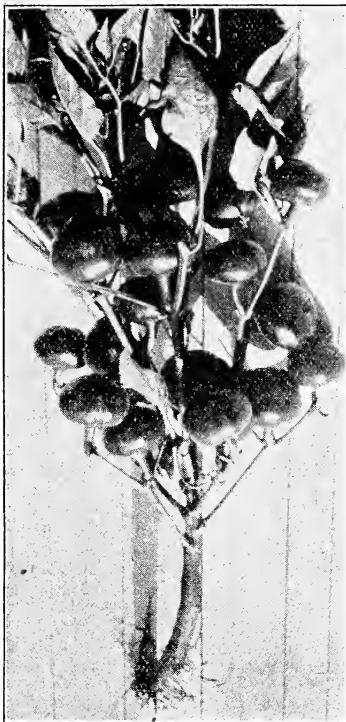
Every home garden should have a row of this Pimiento. For salad parboil it to remove the skin. Stuffed and baked it is far superior to all other peppers. (Pkt. 10c) (oz. 60c) (¼ lb. \$2.00) (lb. \$6.00) postpaid.

**A & M Chinese Giant** A very large pepper of the Bull Nose type, often growing to five inches in diameter. This is the variety grown so extensively in frostless sections for the winter trade, when the grower gets as much as 20 cents per pound for the green pepper. One grower claims that his returns from five acres was \$4,500.00. (Pkt. 10c) (oz. 80c) (¼ lb. \$2.65) (lb. \$8.00) postpaid.

## A & M Royal Pepper

This is an improvement over the Ruby King. While retaining the same delicious flavor of the sweet peppers, it is thicker meat, so much so that it may be canned as is the Pimento. It is particularly desirable for the table as stuffed pepper, because of the delicious flavor, fleshiness and cup shape.

To gardeners we say do not hesitate because a crate of Royal Peppers will weigh as much as a crate and a half of Chinese Giant. (Pkt. 10c) (oz. 80c) (¼ lb. \$2.65) (lb. \$8.00) postpaid.



A Typical Plant of Salad Pimento

**Culture**—For early green peppers, sow seed in hot beds in December and January. Transplant as soon as weather and soil in your locality will permit. For main crop sow seed in February, March and April, in hot bed. Pepper seeds need the heat of a hot bed to germinate it during these months. For fall and winter crop sow seed in out-door beds well prepared, during May and June. Winter crops can be grown in places that are entirely frostless.

All large growers are now planting seed in the fields and thinning out. This does away with the expensive and tedious method of raising plants and transplanting, and is proving satisfactory.

For field culture the plants are set eighteen inches apart in rows thirty inches apart. This would appear too close when the full grown plant covers the field solidly; but it is important to get the rows as close as possible in order to irrigate effectively.

**MARKET**—For the market gardener the Chinese Giant is the big money-maker. There are instances—in the foot-hill sections where they can be grown throughout the winter—where the grower sold \$900 worth from one acre, but as a mid-summer crop it is profitable because of its enormous production.

Improving the old California Chili as it was in 1895 into the large thick meated Anaheim Chili of today, was the first good thing we had accomplished in the way of improving vegetables. Our success in this was probably the forerunner of the many good things we have introduced.

## PEPPERS—Continued



Floral Gem

Spanish Gem

**Floral Gem** This beautiful yellow pepper became popular several years ago. It is  $1\frac{1}{2}$  inches in diameter,  $1\frac{1}{2}$  to 3 inches long, delightfully pungent with a flavor quite distinct from other peppers, and commands an independent price. The supply has not yet caught up with the ever-increasing demand. This pepper turns from green

to a beautiful waxy yellow. When mature it is red. It is marketed when yellow. (Pkt. 10c) (oz. 75c) ( $\frac{1}{4}$  lb. \$2.25) (lb. \$8.00) postpaid.

Mexican Chili is in a class by itself, on account of its extreme pungency. It is not canned but is used almost exclusively for grinding and sold as cayenne, the trade of which is surprising. (Pkt. 10c) (oz. 50c) ( $\frac{1}{4}$  lb. \$1.65) (lb. \$5.00) postpaid.

Our seed is pure and taken from selected peppers grown far from other varieties.

**Spanish Gem** Like the Floral Gem it is very pungent with a flavor that is desired for pickling. In size it will average from  $\frac{3}{4}$  to 1 inch in diameter, and 1 inch to  $1\frac{1}{2}$  inches in length. It is marketed when quite yellow. (Pkt. 10c) (oz. 75c) ( $\frac{1}{4}$  lb. \$2.25) (lb. \$8.00) postpaid.

**Bell or Bull Nose** Do not confuse this with the Chinese Giant. It is similar in shape but scarcely more than half as large. It is much more prolific and a very desirable variety for the home garden. (Pkt. 10c) (oz. 80c) ( $\frac{1}{4}$  lb. \$2.65) (lb. \$8.00) postpaid.

**Small Chili** This small pepper is  $\frac{1}{2}$  inch in diameter, and two to three inches long. Is very pungent and marketed when quite green, although it is also sold when it has become red. It is an old time favorite and finds a market with canners and at stores catering to the Spanish population. (Pkt. 10c) (oz. 80c) postpaid.

**Cherry** A very pungent pepper, round as a cherry, about one inch in diameter, marketed when green. Used largely in pickling and by the foreign trade. There is a profit to the person who will specialize on this and other small pungent peppers. (Pkt. 10c) (oz. 80c) postpaid.

## A & M Potatoes

See Fertilizers

Write Department of Agriculture, Washington, D. C., for Bulletin No. 533, entitled "Seed Potatoes and How to Produce Them"

### Essential Factors in Successful Potato Growing

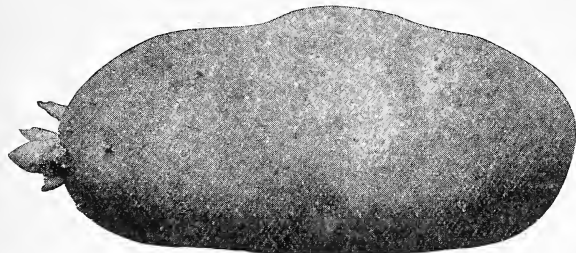
Treat seed stock before cutting. The very best seed may have traces of one or more of the many diseases to which potatoes are subject. It is, therefore, advisable to soak seed potatoes in a solution which will kill whatever disease may be lurking on the outside of the tubers. Make this solution by dissolving four ounces of corrosive sublimate in about two quarts of hot water (be sure it is thoroughly dissolved) in a glass jar and then add to thirty gallons of cold water in wooden vessels. A barrel or wooden tank makes a good receptacle for this purpose. Place the sacks of potatoes in this solution and leave one and one-half hours, then drain, and, if the potatoes are not to be cut immediately spread out to dry. Use the same solution for only four or five lots, as the strength becomes weaker the more it is used. This solution is poisonous and should be handled with care and kept where animals may not drink it. Treated potatoes should also be kept away from stock.

Plant four to five inches deep, 14 inches apart, in rows 30 inches apart. If potatoes follow alfalfa or Melilotus good yields can usually be obtained without the use of commercial fertilizer; but commercial fertilizer will be found profitable, 50 lbs. of nitrate of soda per acre is about right.

Keep soil moist at all times. Do not judge moisture by appearance of the potato plants as when the plants become a very dark green or begin to turn yellow it is then too late to apply water for best results; and potatoes are likely to become rough and knobby.

When cultivating throw the earth toward the plants a little higher at each cultivation; until at last cultivation the ridges are six to ten inches high and broad at top so that tubers will be kept cool and free from tuber moth infection.

**POTATO INSPECTION**—All potatoes intended for seed purposes must be inspected by the County Horticultural authorities before they may be received and again before they may be shipped out. This is a great protection to the grower.



A Typical White Rose

### A & M SEED POTATOES Certificate of Quality

Our potatoes were grown for seed purposes. They are carefully re-sorted, are in good condition when shipped and are recommended by us. You can do no better than to plant our seed potatoes.

### THE VARIETIES WE OFFER

It will cost you nothing to consult us, and may save you from making costly mistakes.

**The White Rose** We will have on hand throughout the planting season, clean selected seed of the popular varieties, but we recommend the White Rose for the reason that for twenty-five years it has proven more satisfactory than other varieties.

It is not particular as to soil. It matures quickly which makes it a good variety to grow without irrigation, besides it is out of the ground before nematode and other enemies have done great injury. Because of its earliness, it costs less to grow it.

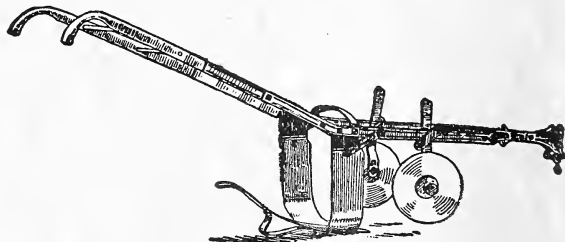
Under the average conditions it is more profitable to grow than any other variety.

**British Queen** Many growers have excellent results with this variety. They have a fairly heavy soil and find it more profitable to plant for a fall crop; it does not mature early enough for spring planting to get the higher price.

We also offer selected seed of the following varieties: Red Rose and Burbank.

Owing to the fluctuation of the market we cannot state price, but we request that when you are in the market for selected seed, write us stating the quantity you want.

It will cost you nothing to consult us. We may save you some costly mistake.



Perine's Sweet Potato Digger

"Have used the Perine's Sweet Potato Digger this season and find it to be a most wonderful machine; has decreased my cost of digging 75 per cent. Gets all my potatoes and in excellent condition. Price \$55.00 f. o. b. here.

"Would be glad to have you refer anyone to me. Yours truly,  
"J. E. SWIFT, Van Nuys, Calif."

"I could not get along without it"

W. E. KIRKPATRICK, Burbank, Calif.

# A & M Pumpkin



For stock only, plant Mammoth King, Estampes, Cushaw, Kentucky Field or Cheese, Sandwich Island, Iron Clad and Connecticut Field.

For the canneries, plant Estampes, Kentucky Field or Cheese.

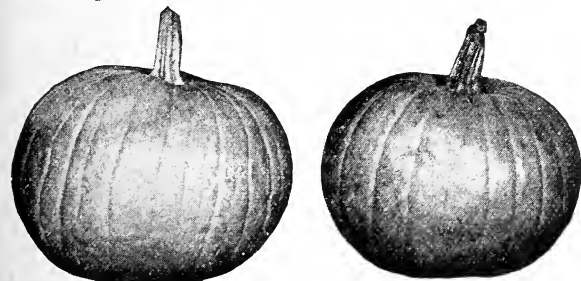
For the home, plant Boston Pie.

**Culture**—Pumpkins delight in rich, sandy soil that is perpetually moist—the soil that retains moisture by the dry farming method, because pumpkins do not want too much water, and to flood them would destroy them, so when irrigating make the furrows nearly as far from the hill as the tip of the vine, and when the vines intersect, run the water through the middle of the row. Plant the seeds every 8 or 10 feet, allowing only one plant to remain.

**Kentucky Field or Large Cheese** This variety is locally called Sweet Pumpkin, and is grown more than any other of its kind for stock, because it is a good keeper, notwithstanding it has a soft shell. It is fleshy and very sweet; also good for pie, and is largely used for canning. On one large ranch in the San Fernando Valley there was planted a large acreage to nearly all the popular varieties; this one was unaffected by the hot sun, and remained in perfect condition while other varieties were sun-burned and decayed quickly. (Pkt. 10c) (¼ lb. 35c) (lb. \$1.00) postpaid.

**Estampes** We have the purest stock seed from which to grow this pumpkin. It is the heaviest pumpkin for its size that we know of; 100 pounds is not an unusual size for them to attain. It is the canner's favorite because of its thick, deep red flesh and the fine sweet flavor. It is without exception the best for dairy stock, and only the scarcity of the seed has prevented it from being more widely known. (Pkt. 10c) (¼ lb. 50c) (lb. \$1.50) postpaid.

An Estampes Pumpkin, weighing 131 lbs., was grown on the ranch of Mr. Hathaway. His boys are active, intelligent farmers and dairymen, and give us the information that when they feed other pumpkins the cows eat them because they have to, and the milk contains only 3 per cent butterfat, but when they feed the Estampes, the cows are just crazy to get at them, and the milk contains 5 per cent butterfat. "Just to try it out, we again fed other pumpkins and the butterfat fell to 3 per cent."



Sugar, or Boston Pie

**Sugar or Boston Pie** A small handsome variety, and very popular. The skin is a deep orange yellow; flesh fine grained and sweet in taste. Famous in Boston as a pie pumpkin. It sells better on our local market than any other variety except the Jack o' Lantern at Hallowe'en time. (Pkt. 10c) (¼ lb. 50c) (lb. \$1.50) postpaid.

**Sandwich Island** The most popular pumpkin in Ventura County. It is as hardy as a citron. A good one to plant where water is scarce. (Pkt. 10c) (¼ lb. 35c) (lb. \$1.00) postpaid.

**Mammoth King** This is the large pumpkin so well have been taken from one acre. As many as 20 tons a weight of 200 pounds. (Pkt. 10c) (¼ lb. 45c) (lb. \$1.25) postpaid.

**Japanese Pie** (Green Cushaw) An excellent pumpkin for pies. The flesh is sweet and of a rich salmon color and free from fiber. It is very prolific; on this account it is profitable to grow for stock. (Pkt. 10c) (oz. 20c) (¼ lb. 35c) (lb. \$1.00) postpaid.

**Ironclad** This is medium to large size, light gray color. The shape is similar to the Connecticut Field Pumpkin. It will not sunburn, is an excellent keeper and of good flavor for pies. It increases the standard of butter fat when fed to dairy cattle. A dairyman from South Africa recommended it to us and sent us some seed from which we first grew our stock. (Pkt. 10c) (¼ lb. 40c) (lb. \$1.25) postpaid.



Connecticut Field (Jack-o'-Lantern)

**Connecticut Field** (The Jack-o'-Lantern)—This is the pumpkin planted largely for the Hallowe'en and Thanksgiving trade, at which time they bring \$20.00 per ton, and two cents per pound at retail stores. Twenty tons to the acre is no unusual yield. If the land has been manured liberally a full crop can be grown among corn. It is a most excellent keeper, and will be sure wealth to all who grow and feed it liberally. (Pkt. 10c) (¼ lb. 45c) (lb. \$1.25) postpaid.

**Cushaw or Crookneck** This excellent pumpkin ought to be planted more largely. There is more pumpkin for its size because of the small seed cavity. It is excellent for pies, and yields enormously. (Pkt. 10c) (¼ lb. 50c) (lb. \$1.50) postpaid.

**MONEY IN GROWING SQUASH AND PUMPKINS.**—The canners consume enormous quantities. They use principally the Large Cheese pumpkins, paying about \$6.00 per ton. Next to the canners are the bakers, who use Hubbard Squash and Small Sugar, paying about \$20.00 per ton.

**PLANT PUMPKINS AND CITRON FOR THE DAIRYMEN**

If you have an idle space of rich sandy loam plant pumpkins any time from May 1st to August.

See the managers of your nearest cannery. Secure a contract with them to grow pumpkins.

# A & M Radish

**Culture**—Seed may be sown the year 'round in California. Radishes thrive best in light, sandy loam, made rich with manure. Sow in drills 10 inches apart. An ounce of seed will sow a hundred feet of row, 10 pounds to the acre.

## Early Scarlet Turnip

One of the earliest and best sorts for forcing; its color is very handsome; flavor very mild, crisp and juicy; stands a great amount of heat without becoming pithy. (Pkt. 10c) (oz. 15c) (¼ lb. 50c) (lb. \$1.50) postpaid.

## French Breakfast

A splendid variety, medium-sized, olive-shaped, very crisp and tender; of a beautiful scarlet color. (Pkt. 10c) (oz. 15c) (¼ lb. 50c) (lb. \$1.50) postpaid.

## Chartiers

A distinct, exceedingly handsome and attractive sort; color of top scarlet rose, shading into pure waxy white at the tip. Attains a large size before it becomes unfit for the table. (Pkt. 10c) (oz. 15c) (¼ lb. 50c) (lb. \$1.50) postpaid.

## Early Long Scarlet

Very brittle and crisp; color a bright scarlet; small top. Six to eight inches long. (Pkt. 10c) (oz. 15c) (¼ lb. 50c) (lb. \$1.50) postpaid.

## Large White Chinese

This is a winter radish of deliciously sweet flavor; can be eaten as a turnip as it is without stringency. The Chinamen use this variety exclusively. (Pkt. 10c) (oz. 15c) (¼ lb. 50c) (lb. \$1.50) postpaid.

## Stump Rooted

### Half Long Scarlet

This variety should be more popular because it is just the right size for table use, not too large, never pithy, but always crisp and sweet. (Pkt. 10c) (oz. 15c) (¼ lb. 50c) (lb. \$1.50) postpaid.

It is not generally known that Early Scarlet White Tipped Radishes may be planted at the same time with beets or turnips between the rows. The radishes will mature and all may be consumed before the turnips or beets are large enough to be crowded.

## Read

**Long White Icicle**  
Every variety listed in this catalogue is the best for the purpose intended. If you will read the instructions you will be able to select just what you should have.

When planting a small garden you will find that a packet of seed is sufficient for one planting, usually enough for a row of 20 feet.

When buying seeds the grower rarely gives credit to the seedsman for the clean seed and high germination. Seedsman are just as careful about the purity of the seed, but too often they must depend upon the integrity of growers over whom they can have no control and whose crops cannot be inspected.

The A & M Seed Co. have a record on file of every sale by mail and every sale delivered to market gardeners, amounting to more than one hundred thousand sales per year. We receive hundreds of complimentary letters, but it is rarely that we receive a complaint about the quality of the seeds we send out. Usually the cause of failure is traced to improper culture, lack of moisture, impoverished soil or unseasonable planting.

The experienced gardener understands the unfavorable conditions and often corrects them, thus avoiding a crop failure. It is the inexperienced grower who fails. It is for these that so much space in this catalogue is given to cultural instruction.



Scarlet Turnip White Tip

## Scarlet Turnip White Tip

An early variety of medium size and excellent flavor, and of a very handsome appearance. (Pkt. 10c) (oz. 15c) (¼ lb. 50c) (lb. \$1.00) postpaid.

## Long White Icicle

For the home garden we consider this a most excellent table variety. Its extreme earliness, beautiful pure white appearance, excellent flavor and crispness should make it a favorite everywhere. (Pkt. 10c) (oz. 15c) (¼ lb. 50c) (lb. \$1.50) postpaid.

## Crimson Giant

A variety extraordinary in that, while growing to an unusually large size, it is always tender, crisp and of mild flavor. It remains in perfect condition a remarkably long time, and unlike other forcing varieties, does not become pithy; root turnip shaped; color a beautiful crimson; flesh firm and crisp. (Pkt. 10c) (oz. 15c) (¼ lb. 50c) (lb. \$1.50) postpaid.

## Japanese All Season

It is a very large, long, snow-white radish; deeply rooted, does not extend above the soil, hence it always is tender and crisp and has a delicious flavor. (Pkt. 10c) (oz. 20c) (¼ lb. 65c) (lb. \$2.00) postpaid.

## Japanese Winter

A half-long white radish more adapted to our winter climate. It compares very favorably with our American varieties, besides it is much larger. (Pkt. 10c) (oz. 25c) (¼ lb. 85c) (lb. \$2.50) postpaid.

## Japanese Summer

Its beautiful white color and mammoth size attracts great attention. It is very tender and the flavor is exceedingly mild. It attains perfection in California, growing twenty-six inches in length and three inches in diameter. It is a profitable radish to grow, as it sells readily. It is excellent cooked as a turnip. (Pkt. 10c) (oz. 25c) (¼ lb. 85c) (lb. \$2.50) postpaid.

## California Mammoth

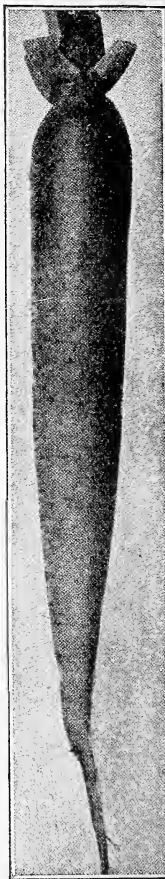
Pure white; the flesh is tender, sweet and crisp, keeps well. Plant from September 1st to March. (Pkt. 10c) (oz. 15c) (¼ lb. 50c) (lb. \$1.50) postpaid.

## China Rose

A delicious radish, crisp, with little tendency to become pithy. Skin is a beautiful deep scarlet and flesh pure white. It is a good seller and is in great demand by the vegetable peddlers. (Pkt. 10c) (oz. 15c) (¼ lb. 50c) (lb. \$1.50) postpaid.



All Season



Chartier

## A & M ROSELLE

**Culture**—Sow seed early in April in the field, four feet apart in rows six feet apart. Cultivate as Okra. There is an early and a late Roselle. Be sure to get the early variety, because the frost is almost sure to destroy the late variety before it matures. We offer only the early variety.

It is an annual plant that has been sufficient-ly tested to indicate its great value and to warrant more extended cultivation. The calyx surrounding the seed pod is used as soon as the flower drops for making jelly and jam. The jelly is superior to guava or currant, and labeled as "Queensland Jelly," is shipped from Australia to all parts of Europe. It is easily grown from seed if planted after the ground is warm; grows rapidly, resists drouth and is very ornamental. Every home garden should have a row of this ornamental and useful plant. (Pkt. 10c) (oz. 75c) (¼ lb. \$2.50) postpaid.

**NOTE**—Our local growers are not up with other localities in advertising and educating the public to the uses of Roselle. The local demand has never been fully supplied. Some one ought to get busy.

We have been advised by a lady from Texas, also one from Cuba, to remove the seed pod, and the jelly is thus greatly improved. The calyx is an excellent substitute for cranberry sauce or pie.

Having received numerous inquiries how to use Roselle, we have decided to insert the answer here. Pick the pods that grown at the axil of each leaf. Boil them until soft and strain through a cloth. Add ½ pint of sugar and the juice of ¼ of a lemon to each pint of juice, and boil again until it jells.

The pods are ready for use in September. We are advised that excellent jelly may be made from the leaves. Therefore it will not be necessary to wait for the pods to mature.

**Pkt. Roselle Pods** in water to cover; let stand over night. In the morning strain, boil to one-half and put in cans; use when needed as lemon juice.

## Agriculture is a Business

The successful grower of the "Great Southwest" is an expert in his line. He has all the United States for a market during the winter months, and all the arid Southwest in the summer time. He must consider well his soil, be an expert in the selection and use of fertilizers, in the selection of his seed suited to his soil, to his climate, to the time of planting and the market for which he intends to grow. He must know to perfection when to irrigate, to cultivate, and when not to do so. He must study insecticides, know what, when and how to apply them. He must not only keep posted as to market conditions and prices, but must figure ahead on these conditions.

When giving consideration to approximate yields and values, take into account the cost of labor, irrigation, time to fertilize, and expense of marketing. All these figure in determining the net profit. Then consider too the adaptability of each crop to your soil and the purpose for which the crop is intended. All must be considered when deciding the advisability of planting field crops.

When in doubt buy Aggeler & Musser's seeds, and always consult AGGELER & MUSSER SEED CO. on all the above subjects. And keep this catalog.

## A & M SALSIFY

**Culture**—Sow the seed in the spring in drills one foot apart and one inch deep, thinning out plants to four inches. It succeeds best in light, well-enriched soil. One ounce of seed for 50 feet of drill.

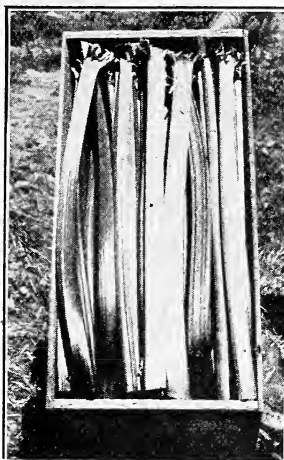
**Mammoth Sandwich Island** A large and superior variety. (Pkt. 10c) (oz. 35c) (¼ lb. \$1.20) lb. \$3.50) postpaid.

## A & M SORREL

**Broad Leaved** This is boiled and served like spinach. It possesses a very fine flavor. As the hot sun tends to increase its acidity, a partial shade is advisable. It should be sown in drills 18 inches apart. It is hardy but the roots should be divided every four years. (Pkt. 10c) (oz. 25c) (¼ lb. 75c) (lb. \$2.25) postpaid.



## A & M RHUBARB



A & M Embree Cherry Rhubarb  
in boxes 24 inches long  
60 Stems Weighed 43 lbs.

**Culture**—Sow the seed any time from February 1st until July 1st, in drills two feet apart, in order that you may cultivate with a horse cultivator. Within five months after sowing the seed the Wagner's Giant variety will be large enough to market, even though the roots are not larger than your thumb. Transplant at any time when the roots are as large as a pencil. Rhubarb requires a rich sandy soil. Therefore plant it on ridges or on the sides of an irrigating ditch. In our hot climate partial shading is beneficial. If you can do so, plant it in an orchard, setting the roots three feet apart, but if in a sunny place, set the roots 18 inches apart, that the leaves of one plant will shade the crown of another.

It is profitable to grow rhubarb if you will plant the Embree Cherry. It is the ideal rhubarb.

Read about it!

## The Embree Giant Cherry Rhubarb

(See Front Page Cover)

This is the first time the Embree Giant Cherry Rhubarb has been listed in any catalog. We are proud to be the introducers of it. (Per plant 75c) (10 plants \$6.00) postpaid. (100 plants \$50.00) F. O. B. Here.

About ten years ago Mr. W. J. Embree discovered one plant in his patch of Rhubarb that was much larger than others, and more highly colored, a beautiful cherry red, which the rhubarb world had long been looking for. From this plant he propagated more until he had a field of 10 acres. The Embree Cherry Rhubarb has built up a demand independent of other varieties, and indeed its beautiful appearance makes it a ready seller, aside from the fact it is less tart than any other variety, and although very large. There is no coarse fibre, and it should never be peeled.

The dealer and shipper prefer it because it is the best seller and also it will keep in prime condition longer than any other variety. The stems will keep in marketable condition for several weeks after maturity and without becoming soft or pithy, as most varieties do.

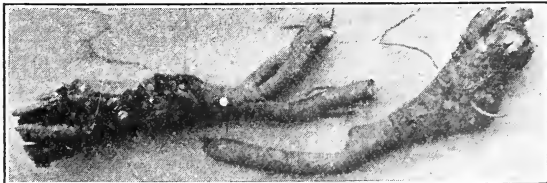
The grower should prefer it to all others because it rarely runs to seed. It will yield more tonnage per acre than any other variety. Mr. Embree has marketed as much as 16 tons per acre from one cutting and 35 tons per acre for the season, and could have gathered several tons more, had he picked a little closer. The stems show an average weight of one-half pound.

He recommends planting during the latter part of February or March in low lands where frosts may retard the growth of earlier planting, but in warmer locations he recommends earlier planting. Set the plants 3 feet apart in rows 5 or 6 feet apart. The first season the stems may be packed easily within a 24 inch box. The second season their prime growth is 30 inches long and may be sold to the local canner without packing.

There is so little tartness in the leaves that stock eat them readily which fact is no little consideration to any grower who may have stock to eat it, or a market for it.

Per Plant .....	\$.75 Postpaid
10 Plants .....	6.00 Postpaid
100 Plants .....	50.00 F. O. B. Here

Every plant a full crown.



A & M Embree Cherry Rhubarb  
Every Root Has a Perfect Crown

**Giant Winter** It is undoubtedly a very productive and therefore very profitable variety. It is displayed at the market places in apple boxes, and the boxes are barely long enough to accommodate the large, thick stems that will average one-half pound each, often weighing more than a pound. It is remarkably early, bearing large stems within five months from planting the seed, and grows nearly the entire year. The stems are so tender that they do not need peeling. (Pkt. 10c) (oz. \$1.60) (¼ lb. \$5.00) lb. 16.00) postpaid.

## A & M Spinach

**MARKET.**—On the local market there is a uniform demand throughout the year for home consumption, but during the winter months the shipper requires enormous quantities. The canners contract for large acreages each year.

**Garden Culture.**—Sow in drills, one foot apart, and for succession, every two weeks; select a shady spot; as it grows, thin out for use, keeping clean of weeds. It grows the year round in California. One ounce of seed for 100 feet of drill; 12 pounds to an acre. Field culture is the same as for lettuce but requires no thinning out. Better Spinach may be grown in the shade of an orchard.

The consumption of Spinach has increased enormously during the past few years. The amount shipped out of California to eastern markets amounts to several hundred carloads, and the canners have packed during 1922, 1,190,525 cases as compared with 434,000 cases in 1921.

Spinach is well adapted to a large area in California and may be grown wherever the conditions are favorable for the production of vegetables. The yield per acre varies from three to five tons, with an average production of four tons. (As much as 8 tons have been grown). When selling to the cannery the customary price is about \$25 per ton.

Spinach is best adapted to a rich, light loam and is not a satisfactory crop to grow on soils of poor quality or those which will not retain moisture. The climate requirements of this crop are very exacting. The plants will stand without injury a relatively low degree of temperature, but are seriously injured by heat. Planting early in the fall and late in the spring should be avoided since the plants will not make a satisfactory growth during hot weather. When planted during the rainy season, provided the soil is of a sandy nature and is free from weeds so that it will not pack, this crop may require no cultivation. The crop is ready to harvest in six weeks to two months after planting.

**A & M Summer Success** For several years we have endeavored to secure a type of Spinach that would prove profitable to grow in summer time, and after several trials this one proved the greatest success. With moist, loamy or peat land the A & M Summer Success will grow leaves 14 inches long. The leaves are very meaty and crisp. It is the best summer Spinach, but it is also the best winter growing variety. (Pkt. 10c) (¼ lb. 25c) (lb. 75c) postpaid.



Bloomsdale—Viroflay

**Viroflay** This variety has become popular as an all-round Spinach. It is desired by the grower because it is harder than other varieties and will produce in tonnage per acre more than any of them.

The canner and shipper like it because of its large smooth leaves.

The consumer prefers it because it is exceedingly tender and of mild flavor. (Pkt. 10c) (¼ lb. 20c) (lb. 60c) postpaid.

**Bloomsdale** Large green thick crumpled leaves, grows luxuriantly, producing twelve to fifteen tons per acre. (Pkt. 10c) (¼ lb. 20c) (lb. 60c) postpaid.

**Broad-Leaved Flanders** Is one of the best varieties for all purposes, and excels others for summer planting. (Pkt. 10c) (¼ lb. 20c) (lb. 60c) postpaid.

**Prickley Seeded Winter** This variety thrives best in the coldest weather, and is the money-maker for the market gardener. Our seed is now American grown, and for several years has given entire satisfaction. The leaves are large, fleshy and very tender. (Pkt. 10c) (¼ lb. 20c) (lb. 60c) postpaid.

**New Zealand** A spreading vine with numerous branches. One plant will cover an area four feet in diameter. The tender tips may be cut every few days and cooked as spinach; it is just as good. One packet of seed is enough for a family garden. (Pkt. 10c) (oz. 25c) (¼ lb. 75c) (lb. \$2.25) postpaid.

## A & M Squash

### Winter Squash

**Culture.**—Seed should not be planted until all danger of frost is past. In open ground plant in hills ten feet apart where irrigated, and fifteen feet apart where not irrigated. In orchard plant only one row between trees. When the vine is well along do not flood the hill, but keep the irrigation furrow nearly as far from the hill as the length of the vine. Keep in mind that the roots are longer than the vines.

**A & M Banana** This squash grows from one to two feet in length. Flesh firm and solid, of beautiful orange-yellow and excellent quality. It keeps from one season until another. When quite young it is excellent to cook as a marrow. (Pkt. 10c) (oz. 20c) (¼ lb. 65c) (lb. \$2.00) postpaid.

**Kitchenette** A small Hubbard Squash reduced in size to about 5 pounds, just right for the average family. One half of a large Hubbard is usually wasted. The Kitchenette is a good seller for the vegetable vender. (Pkt. 10c) (oz. 25c) (¼ lb. 75c) (lb. \$2.00) postpaid.

**Green Warty Hubbard** This variety is grown more largely throughout the United States than any other. It is used in many ways, but mostly for pies. It is a good keeper and because of its hard warty rind, it is the best of shippers. Therefore many acres are grown in Southern California for that purpose, and many more for the bakers, the canners and family consumption. (Pkt. 10c) (oz. 20c) (¼ lb. 50c) (lb. \$1.50) postpaid.

**Fordhook Squash** This is a most desirable squash for either summer or winter use. The vines are of strong, vigorous growth and wonderfully productive. Squash oblong in form, eight or ten inches in length, slightly ridged; smooth, thin, yellowish skin and of a yellowish color. If gathered young for cooking it is excellent, while if allowed to ripen on the vine they can be stored and will keep in good condition until late the following June. Either for baking like sweet potatoes or making pies during the winter, the squash is very fine. (Pkt. 10c) (oz. 20c) (¼ lb. 60c) (lb. \$1.75) postpaid.

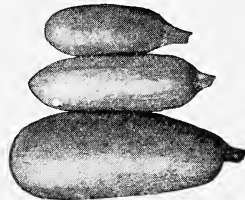
**English Cream Marrow** It is as sweet as a sweet potato, and has none of that pumpkin flavor. It is good any way it comes on the table, and is better than Hubbard Squash for pie. It is 6 to 8 inches long and half as thick. Decidedly firm. It will keep from one season to another. (Pkt. 10c) (oz. 20c) (¼ lb. 60c) (lb. \$1.75) postpaid.

**Golden Hubbard** The flesh is of a deep golden yellow—a much richer color than the Hubbard—fine grained, cooks very dry, and has excellent flavor. In its keeping qualities it is fully equal to the green variety. (Pkt. 10c) (oz. 20c) (¼ lb. 65c) (lb. \$2.00) postpaid.

**Pike's Peak** An excellent winter squash. Fine grained and superior in flavor and keeping qualities to the Hubbard Squash, but not so well known. (Pkt. 10c) (oz. 20c) (¼ lb. 50c) (lb. \$1.50) postpaid.

**Boston Marrow** Flesh, bright orange or rich salmon color; for sweetness and excellence is unsurpassed. (Pkt. 10c) (oz. 20c) (¼ lb. 45c) (lb. \$1.25) postpaid.

### SUMMER SQUASH



**Zucchini** The favorite Italian Summer Squash. It should be eaten when quite young, four to six inches long. It is a delicious summer variety; do not hesitate to plant it. It is very prolific, a few hills will suffice to keep the family well supplied the entire summer. It is now more popular on the market than the White Bush Scallop. (Pkt. 10c) (oz. 20c) (¼ lb. 60c) (lb. \$2.00) postpaid.

**Cocozelle** An excellent squash for many purposes. Equal to the White Bush Scallop for the table when taken quite young. It is enormously prolific. When gathered closely and fed to stock, the vines will keep bearing continuously all summer, and far into the fall. It survives drought to a wonderful degree. (Pkt. 10c) (oz. 25c) (¼ lb. 85c) (lb. \$2.50) postpaid.

**Golden Summer Crookneck** The popular well known Crookneck (Pkt. 10c) (oz. 20c) (¼ lb. 50c) (lb. \$1.50) postpaid.

**A & M White Bush Scallop** The well known summer squash that has been the standard for more than fifty years, and always in demand because of its earliness and it is delicious on the table whether stewed or fried as Egg Plant. (Pkt. 10c) (oz. 20c) (¼ lb. 40c) (lb. \$1.25) postpaid.

**Long White Marrow** This is exceedingly delicious as well as the most prolific of all egg plant Marrows. Steamed when quite young or fried as egg plant it is equal to egg plant itself. The squash is about 12 inches long when mature, and has a light creamy color. It grows luxuriantly and bears abundantly all summer under very adverse conditions. It will grow when continuously harvested, more food for hogs than pumpkins. (Pkt. 10c) (oz. 20c) (¼ lb. 60c) (lb. \$1.75) postpaid.

# A & M TOMATOES

If you are growing Tomatoes for the shipper, ask for circular of cultural instructions.

## CULTURE

**Culture.**—Tomatoes do best on light warm, not over-rich soil, and success depends upon securing a rapid, vigorous and unchecked growth during the early part of the season. Sow in hot-beds from 6 to 8 weeks before they can be set out of doors, which is when danger from frost is past.

Transplant three to six feet apart in rows four to six feet apart, according to variety—three feet for those varieties of upright growth, as the Dwarf Champion, and six feet is not too far apart for vining varieties which soon cover the ground solidly. The soil should be plowed and pulverized to a depth of ten or twelve inches, the deeper the better, in order that the roots may keep in the cool earth, for as soon as the roots are heated by the hot, dry soil near the surface, the plant quickly sickens and dies, and the grower can see no cause for it.

In the early fall when the nights have become cool and heavy dews prevail, it would be well to spray with Bordeaux Mixture, to prevent blight. It may be necessary also to spray after each rain throughout the winter.

To prevent root-blight, pour a cupful of Bordeaux around the stem at the surface of the ground.

The time of planting and variety depend upon your local market, soil and climatic conditions, and the purpose for which they are grown.

On sandy loam soil near the foothills, where it is nearly frostless, we recommend planting seed of the A & M First Early in hot beds during December and January for winter and early spring tomatoes. Tomatoes that mature the latter part of April are considered early for Southern California.

Plant seed of the Stone and Greater Baltimore varieties during April, May, June and July, for the summer and fall crops, also for canners and shippers.

## Tomato Hints

**Picking and Hauling the Fruit.**—Pick carefully and watch your pickers.

Do not disturb the vines any more than can be helped. Impress that upon your pickers.

The early planting is done in sheltered places along the foothills and along the coast, also in Coachella and Imperial Valleys. This crop matures during April and May and is shipped to all parts of the United States.

The Mid-Summer crop is set out at any time from April 1st until July 1st. This comprises the large acreage planted throughout the southwest for local consumption and for the numerous canneries. We have no figures as to acreage planted for this purpose, but it is enormous.

July 1st to October 1st and October are the months for planting Tomatoes for mid-winter consumption. Usually the local market absorbs the entire crop.

Our advice is that it is profitable to grow Mid-Summer Tomatoes for the canneries at a satisfactory contract price. It is too much of a gamble to grow a large acreage for the open market.

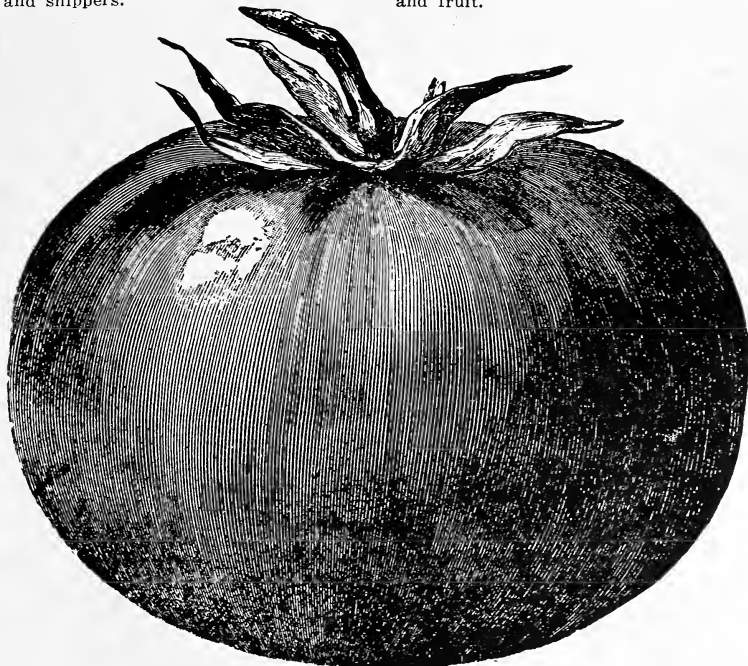
It is profitable to plant as late as September 1st in foothill sections.

Your crop is then likely to be in its prime when the colder locations will have been destroyed by frost.

This too is about the time when the demand comes from the East.

Two of the main tomato pests in Los Angeles county are the big tomato worm and the corn ear worm. The Farm Advisor's office reports that good control work on these worms can be had by dusting at intervals with a mixture of one part finely powdered lead arsenate to four parts of hydrated lime.

The same formula is effective against flea beetles and certain other insects which attack the young plants and some growers are commencing to dust shortly after setting in order to keep ahead of the succession of pests damaging both foliage and fruit.



## A & M IMPROVED STONE

### The Most Popular Tomato

FOR MARKET NEAR AND FAR—THE TOMATO FOR SHIPPING AND CANNING

### A & M Improved Stone

This is the most popular tomato in Southern California. Several thousand acres are planted to this variety exclusively for shipping to Eastern points after other tomatoes have been destroyed by frost. For this purpose the seed is planted about June 15th, and the tomato brought to full size about October 1st, after which it gradually ripens as wanted for shipping. The tomato is of good size, bright red, solid, smooth, and enormously productive.

The canners prefer it because of its uniformly desirable size and solidity for canning. The grower prefers it because of the vigorous growth and large production extending throughout the season far into the winter months. (Pkt. 10c) (oz. 40c) (¼ lb. \$1.35) (lb. \$4.00) postpaid.

A & M Improved Stone

## NORTON—A Wilt Resisting Variety

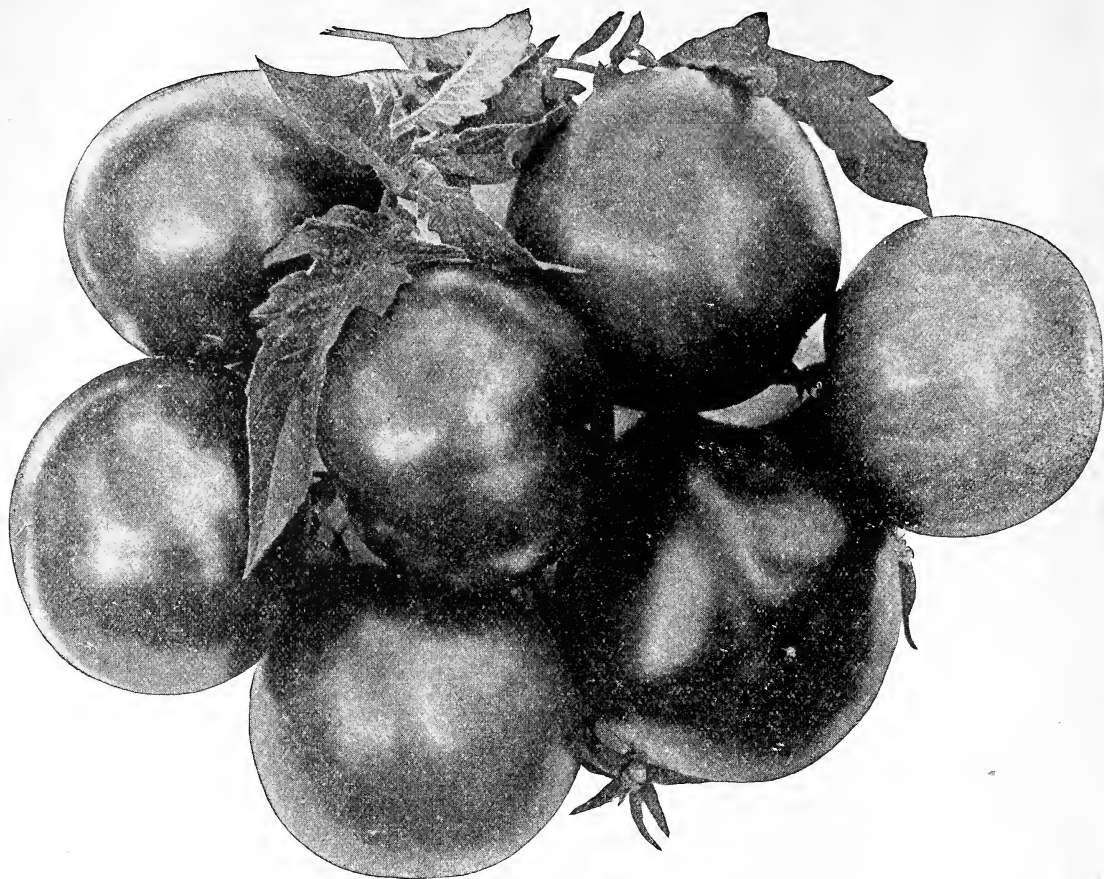
### Norton

The Department of Agriculture has endeavored to find a variety of tomato that would be immune to wilt. No variety has been discovered to be immune, but the Norton proved to be very resistant and because of this and of the fact that it is a practical all round tomato like the Stone which it resembles in every particular. We therefore recommend it to growers who have heretofore suffered from the ravages of tomato wilt. (Pkt. 10c) (oz. 50c) (¼ lb. \$1.65) (lb. \$5.00)

## A Demonstration

Last summer the college of Agriculture conducted a demonstration plot of tomatoes in San Fernando Valley. Along with a large number of varieties were several of the wilt resistant strains, among them the Norton. All were planted in wilt infested soil. The Norton came through the best of all. Many varieties died, a few survived, but the Norton proved worthy of the title, "A Wilt-Resistant Tomato."

# A & M TOMATOES



A & M First Early  
In the \$1,000,000 Class

**Early King** This variety has become very popular for early planting in Coachella and Imperial Valleys for the reason that every blossom produces a tomato, that it matures very early, is smooth, is of fair size, is of good flavor and is a good shipper. (Pkt. 10c) (oz. 50c) (¼ lb. \$1.75) (lb. \$5.00) prepaid.

**Ponderosa** A very large, purple tomato with few seeds and of excellent flavor. Our strain is round and smooth—not the usual oblong wrinkled kind. Favorite for the home garden. (Pkt. 10c) (oz. 65c) (¼ lb. \$2.20) (lb. \$6.50) postpaid.

**Dwarf Ponderosa** A large tomato on a small vine; just the thing for a small garden. The tomato is delicious. (Pkt. 10c) (oz. 75c) postpaid.

**Golden Ponderosa** A very large yellow tomato having a delicious flavor. It is ideal for salads and with a little finely sliced lemon makes excellent preserves. It yields enormously. We recommend it for the home garden. (Pkt. 10c) (oz. 75c) (¼ lb. \$2.50) (lb. \$7.50) postpaid.

**June Pink** The most popular extra early tomato grown in the South and East. It is very prolific and may be compared with the A & M First Early except its pink color. (Pkt. 10c) (oz. 40c) (¼ lb. \$1.35) (½ lb. \$2.25) (lb. \$4.00) postpaid.

**Dwarf Champion** (Tree Tomato)—Has long been a favorite midsummer tomato. Pink in color, smooth and solid, making it a good shipping variety. This has proven very satisfactory in Arizona. Its dense foliage protects the fruit from sunburning. (Pkt. 10c) (oz. 40c) (¼ lb. \$1.35) (lb. \$4.00) postpaid.

**San Jose Canner** This variety is a favorite with canners for the sole reason of its enormous yield of large tomatoes regardless of shape. We recommend it where tonnage is desired above all else. (Pkt. 10c) (oz. 75c) (¼ lb. \$2.50) (lb. \$7.50) postpaid.

**A & M First Early** for the early market. We introduced the A & M First Early in 1909, and from that time to the present it has superseded all other early varieties throughout Southern California, and is constantly growing in popularity here and elsewhere. For a first early money-maker, it has no equal in the tomato line. We cannot give it too much praise. The growers are not looking for an earlier one. It is good enough. (Pkt. 10c) (oz. 50c) (¼ lb. \$1.75) (lb. \$5.00) postpaid.

**Earliana** The plants are quite hardy, with rather slender branches and moderate growth, well set with fruits, nearly all of which ripen very early in the season. The tomatoes are bright red and close together in clusters of five to eight; all of medium size, averaging 2½ inches in diameter. (Pkt. 10c) (oz. 40c) (¼ lb. \$1.35) (lb. \$4.00) postpaid.

**Bonnie Best** Extra early, bright red, uniformly smooth, medium sized, solid and very prolific. It is very popular among growers of early tomatoes throughout the United States and wherever it has been tried. (Pkt. 10c) (oz. 40c) (¼ lb. \$1.35) (lb. \$4.00) postpaid.

**John Baer** has exceeded every claim we made for it. It enabled the canners to begin two weeks earlier. Every tomato a smooth one. It is very prolific, every cluster bears four or five uniformly sized smooth tomatoes red from blossom to stem. We recommend it for heavy soils and for planting in young orchards. It has naturally a scant foliage suitable for early maturing, but will yield ton for ton with the Stone. For early local market and early canning plant the John Baer. (Pkt. 10c) (oz. 50c) (¼ lb. \$1.75) (lb. \$5.00) postpaid.

**Chalk's Early Jewel** Excellent early tomato for home or nearby market; very prolific, red, smooth and desirable size. Its mild flavor makes it desirable as a salad. (Pkt. 10c) (oz. 40c) (¼ lb. \$1.35) (lb. \$4.00) postpaid.

## A &amp; M TOMATOES—Continued

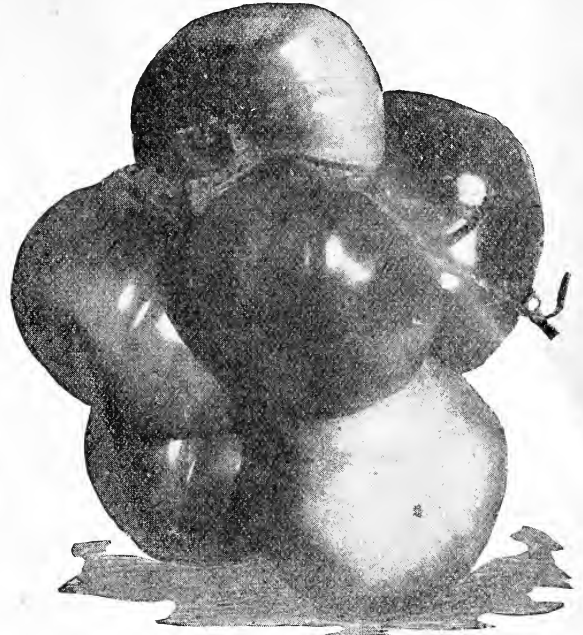


A pleased customer with A &amp; M Globe

**A & M Globe** This variety has become very popular with the large growers in old Mexico. They have learned that when it has turned from the green to a lighter color with just a suspicion of red it is in prime condition to ship to the farthest market with the least deterioration. It is nearly as round as a globe, produces abundantly and is a delightful table variety, almost without acidity, and is now considered the best shipper for the farthest market. (Pkt. 10c) (oz. 45c) (¼ lb. \$1.50) (lb. \$4.50) postpaid.

**The Early Shipper** It is very prolific, medium to large size, and red all over. It is very profitable to the early shipper. It is equal to the Stone for canning and has a better flavor. If you are growing for the early market, do not hesitate to plant it. (Pkt. 25c) (oz. \$1.50) (¼ lb. \$5.00) (lb. \$15.00).

**Dwarf Stone** (Tree Tomato)—Large, red, smooth and solid. The stalk is upright with dense foliage protecting the fruit from the heat of the sun. It is a desirable tomato to grow in the interior valleys. (Pkt. 10c) (oz. 40c) (¼ lb. \$1.35) (lb. \$4.00) postpaid.



Burwood Prize

## BURWOOD PRIZE—Another New One

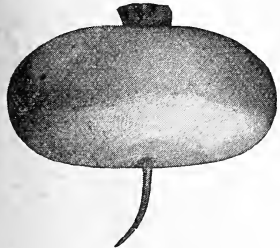
There would be no justification to add to our long list of varieties but each one seems to have a purpose for which it is particularly suited. Therefore we are adding one more to our already long list of varieties. The Burwood prize. A large scarlet tomato having a delightfully mild flavor desirable for salads and for all round cooking. It is an ideal tomato.

If you would build up a trade with exclusive hotels, grow this prize tomato. (Pkt. 10c) (oz. 50c) (¼ lb. \$1.50)

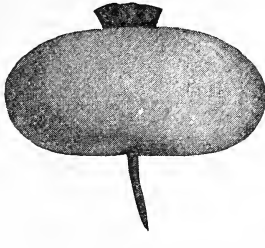
When the plants have grown to a height of about 12 inches, the grower will find a sick plant here and there throughout the field. An examination of the roots may reveal the fact that it is no disease but some injury to the root or improper setting of the roots when planted.

## TURNIPS

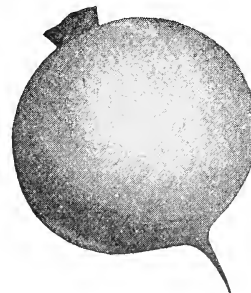
**Culture**—Turnips may be sown broadcast on damp sandy soil or in drills as beets and carrots. Drill in double rows on ridges not too thick in the row. The Purple Top Globe variety is now leading in popularity because of its mild flavor and its adaptability to our summer climate.



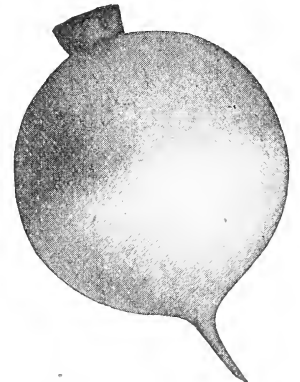
Purple Top Strapleaf



White Flat Dutch



Snowball



Purple Top Globe

**Early Purple Top Strap-Leaf** A very popular variety for either family or market use; large size, white, purple above ground; table variety. (Pkt. 10c) (oz. 20c) (¼ lb. 40c) (lb. \$1.25) postpaid.

**Golden Ball** A rapid grower of excellent flavor; bright yellow color; good keeper and a superior table variety. (Pkt. 10c) (oz. 20c) (¼ lb. 40c) (lb. \$1.25) postpaid.

**Early White Flat Dutch** An early white-fleshed strap-leaved variety; for quick growth, mild flavor and excellent quality. (Pkt. 10c) (oz. 20c) (¼ lb. 40c) (lb. \$1.25) postpaid.

**Purple Top Globe** Solid, very sweet, slow to get pithy. The very best variety for the summer season. Indeed, the best for any season, but slower to mature than the Strap-Leaf. (Pkt. 10c) (oz. 20c) (¼ lb. 40c) (lb. \$1.25) postpaid.

**Snowball** Next to the Purple-Top Globe in popularity, but preferred by many because of its beauty and excellent flavor. It is slow to get pithy in the summer, but always crisp during the winter. (Pkt. 10c) (oz. 20c) (¼ lb. 40c) (lb. \$1.25) postpaid.

**Purple-Top Rutabaga** The best of the Swede Turnips. Very hardy and productive; flesh yellow, is very solid, sweet and well flavored. (Pkt. 10c) (oz. 20c) (¼ lb. 40c) (lb. \$1.25) postpaid.

It is not generally known that Turnips may be planted thickly, then may be thinned one plant to every three inches. The long tender leaves, cooked as mustard or collards, are even better than mustard.

## A & M Flower Garden

### Special for 1925

Illustrated on back cover

We are offering this year a combination of flowers which will give a beautiful garden display, and fill your home with cut flowers for many months.

The Gladiolus—Prince of Wales, is a recent introduction and has the very popular salmon pink color with a lovely satin texture to the petals. The flowers are large and open. Each 15c, \$1.50 per dozen.

The bright attractive colors of the Painted Daisies (*Chrysanthemum Carinatum*) combined with their keeping qualities as cut flowers are bringing them into popularity rapidly. They are of easy culture preferring a sunny location

Red with yellow zone,  
White with scarlet zone,  
Yellow with scarlet zone,  
Pink with crimson zone,  
Primrose, brown center,  
Golden yellow, brown center,  
White with yellow zone,  
Pkt. 10c each.

Special collection of above seven colors, 50c.

A & M Giant Spencer Sweet Peas need no introduction. In color, size, fragrance and length of stem they satisfy the most critical. The mixture which we offer is a beautiful blend of the largest and best colored varieties including the latest novelties.

A & M Giant Spencer Sweet Peas, Mixed Pkt. 10c, oz. 30c.

#### A & M FLOWER GARDEN SPECIAL—

1 dozen Gladiolus—Prince of Wales,  
Special collection of seven packets of Painted Daisies.  
1 oz. A & M Giant Spencer Sweet Peas, Mixed.

\$2.00



## Radio Garden Talks

By FRED C. McNABB

*Broadcast Wednesday Noon, each week*

From "K. H. J." THE TIMES, Los Angeles, Cal.

General garden information is always interesting to anyone who enjoys the open air activities in a California garden.

To know the proper planting seasons, to understand the control methods for insect garden pests, the preparation of soil, etc. makes gardening a pleasure and the greater the understanding, the greater are the possibilities of satisfying the desire that every Californian has to grow things successfully.

The weekly radio garden talks by Mr. Fred C. McNabb are timely, instructive and helpful. Listeners in have undoubtedly profited by them and we hope that others who have not had the benefit of these weekly talks will become members of the great radio family and hear them regularly. We here present his picture that you may see the man who talks to you over the radio.



F. C. McNabb

# Classification of Flower Seeds for Special Purposes

This page is intended to aid you in the selection of your seeds that you may have flowers all the year round, and for every purpose.

## FLOWERING ANNUALS, ALSO SOME PERENNIALS WHICH FLOWER FIRST SEASON FROM SEED

Varieties Marked \* Are Best for Beds and Masses

Abronia	*Chrysanthemum	Ice Plant	*Pansy
Acroclinium	mum	Kochia	*Petunia
*African Daisy	(Annual)	*Larkspur	*Phlox
*Ageratum	*Cineraria	Lavatera	*Poppy
*Alyssum	Clarkia	Linum	*Portulaca
*Antirrhinum	*Convolvulus	Lobelia	Rhodanthe
Arctotis	Cosmos	Lupinus	Rudbeckia
*Asters	Dahlia	Marigold	Salpiglossis
Balsam	Datura	Marvel of	*Salvia
*Bartonia	*Dianthus	Peru	Scabiosa
Begonia	*Dimorphothea	Matricaria	Schizanthus
Bellis	*Eschscholtzia	Matthiola	*Silene
Brachycome	*Gaillardia	Mignonette	Stevia
*Calendula	Geranium	Mimulus	*Stocks
*Calliopsis	*Godetia	Mirabilis	Sunflower
*Candytuft	Gomphrena	Myosotis	Sweet Peas
Canna	Gypsophila	Nasturtium	*Verbena
Carnation	Helianthus	Nemesia	Vinca Rosea
*Celosia	Helichrysum	Nemophila	*Viola Cornuta
Centaurea	Hollyhock	Nicotiana	Wallflower
	(Annual)	Nigella	(Annual)
	Hunnemannia	Oenothera	*Zinnia

## FLOWERING PERENNIALS

For Permanent Beds and Borders, Many Flowering the First Season

Agathaea	Chrysanthemum	Gypsophila	Pyrethrum
Anchusa	Coreopsis	Heliotrope	Ricinus
Anemone	Cyclamen	Hollyhock	Romneya
Antirrhinum	Daisy	Hunnemannia	Salvia
Aconitum	Dahlia	Lantana	Scabiosa
Aquilegia	Delphinium	Lobelia	Shasta Daisy
Begonia	Dianthus	Lupinus	Statice
Bellis	Digitalis	Mimulus	Stevia
Canterbury	(Foxglove)	Myosotis	Stocks
Bells	For-Get-Me-Not	Pansy	Snapdragon
Campanula	Freesia	Pentstemon	Sweet William
Canna	Gaillardia	Petunia	Valeriana
Carnation	Geranium	Phlox	Verbena
Centaurea	Gerbera	Poppy	Vinca
Candidissima	Geum	Primula	Viola
			Wallflower

## FOR SHADY PLACES

Anemone	Bellis	Scarlet Flax	Pansy
Antirrhinum	Daisy	Foxglove	Primula
Aquilegia	Clarkia	Godetia	Viola
Begonia	*Cineraria	Mimulus	Violets
(Tuberous)	Cyclamen	Myosotis	Ferns
	Delphinium	Oenothera	

## FOR CUT FLOWERS

Acroclinium	Calliopsis	Gerbera	Salpiglossis
Antirrhinum	Celosia	Gypsophila	Salvia
Aquilegia	Centaurea	Hunnemannia	Scabiosa
Asters	Chrysanthemum	Larkspur	Schizanthus
Candytuft	Coreopsis	Lupinus	Statice
Carnation	Cosmos	Marigold	Stevia
Arctotis	Dahlia	Matricaria	Stocks
Bartonia	Daisies	Mignonette	Sunflower
Brachycome	Delphinium	Pentstemon	Sweet Peas
Calendula	Dianthus	Poppies	Zinnias
	Gaillardia	Pyrethrum	

## ORNAMENTAL AND FOLIAGE PLANTS

Amaranthus	Centaurea	Coleus	Pyrethrum
Canna	Candidissima	Kochia	Ricinus

## FRAGRANT FLOWERS

Abronia	Mimulus
Alyssum	Nicotiana Affinis
Centaurea	Pansy
Carnation	Scabiosa
Clematis	Paniculata
Cyclamen	Stocks
Dianthus	Sweet Peas
Heliotrope	Sweet William
Mathiola	Violet
Mignonette	Wallflower

## EVERLASTING FLOWERS

Ammobium	Helichrysum
Acroclinium	Ornamental Grasses
Gomphrena	Rhodanthe
(Globe Amaranth)	Statice
Gypsophila	Xeranthemum
Paniculata	

## FOR HANGING BASKETS, WINDOW BOXES, etc.

Drooping	Upright
Alyssum	Coleus
Asparagus Sprengeri	Geranium
Convolvulus	Vinca Rosea
Kenilworth Ivy	Pansy
Lobelia	Viola
Nasturtium	Begonia
Petunia	Ageratum
Smilax	Heliotrope
Thumbergia	Primulas
	Candytuft

## FOR EDGING AND BORDERS

Ageratum	Lobelia
Alyssum	Marigold (Dwarf)
Asters (Dwarf)	Myosotis
Begonia	Nasturtium
Bellis	Nemophila
Candytuft	Pansy
Centaurea	Phlox Drummondii
Candidissima	Petuna Nana Erecta
Coleus	Pyrethrum
Dianthus	Shasta Daisy
Dimorphothea	Sweet Peas Cupid
Gomphrena	Viola
Kochia	Zinnia (Dwarf)

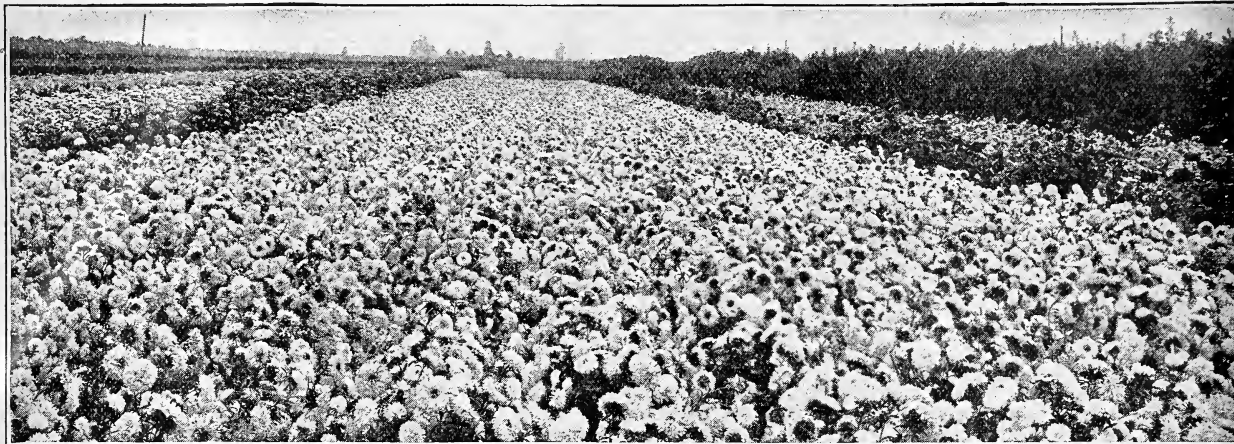
## CLIMBING VINES

Annual Perennial

Balloon Vine	Ampelopsis
Balsam Apple	Antigonon (Bulbs)
Balsam Pear	Asparagus
Canary Bird Vine	Australian Pea Vine
Cardinal Climber	Clematis
Convolvulus	Coboea Scandens
Cypress Vine	Ipomoea
Japanese Hop	Lathyrus
Hyacinth Bean	Moon Vine
Ipomoea	Mandevilla
Japanese Morning	Mina Lobata
Glory	Passiflora
Mina Lobata	Smilax
Nasturtium	Maderia Vine
Scarlet Runner	(Bulbs)
Sweet Peas	Wisteria
Thumbergia	Cinnamon Vine
Wild Cucumber	(Bulbs)

# FLOWER SEEDS

SEE INSIDE BACK COVER FOR PLANTING CALENDAR



A Seed Field of A & M Asters

**Tender or Greenhouse** means the plant will not stand the least frost. All such must be planted late in spring (May) or in a greenhouse.

**Half Hardy** means the plant will stand any light frost, but needs protection against very cold weather. These should be planted in the spring (March and April), not in the fall.

**Hardy** means the plant will stand considerable frost, or practically all we have on the Pacific Coast. These may be planted in the fall or in the spring (October to May). If sown in the fall they will come into bloom earlier than if sown in spring, even if the plants do not make much progress during the cold weather.

**Annuals** are plants that bloom in the first year from seed,

and the plant dies after one season. Tender annuals must be sown in spring (April to June) and hardy annuals may be sown in either spring or fall (October to May).

**Biennials** are plants that bloom the second year from seed, and plant dies after blooming. In California many of these will bloom the first year if sown early. Sow under same conditions as perennials.

**Perennials** are plants that bloom the second year from seed, and the plant lives and blooms during successive years. If sown in early spring (February to April 15) many perennials will bloom the first year from seed. Tender and half-hardy perennials are best sown in spring after frost is over (April 15 to June). Hardy perennials are best sown in late summer and early fall (July to October) for next year's flowers.

## ABRONIA (Sand Verbena)

A hardy annual, trailing in habit, about nine inches high, bearing verbena-like clusters of flowers, which are very fragrant. A native of California. Thrives in dry situations, and is valuable for rock work or hanging baskets.

**Umbellata**—Rosy lilac. Pkt. 10c.

## ACROCLINIUM

Hardy annual everlasting flowers, white and self pink with golden centers. Should be cut the first day they open.

**Double Rosea**—Bright pink. Pkt. 10c.

**Double Mixed**—Pink and white. Pkt. 10c.

## AGATHEA

Sometimes referred to as the Blue Marguerite. Plants dwarf and compact, covered throughout a long season with myriads of small Blue Marguerite-like flowers. These are splendid for cutting purposes. Pkt. 10c.

## AGERATUM (Floss Flower)

A hardy annual of easy culture, especially valuable for bedding, as it is literally covered with blossoms all summer. Sow the seed early in the spring, either in boxes to transplant, or out of doors, and thin to four to six inches.

**Blue Perfection**—Deep blue, one foot high. Pkt. 10c.

**Dwarf White**—One foot high. Pkt. 10c.

**Mixed**—Pkt. 10c, 1/4 oz. 25c.

## ANCHUSA ITALICA

**Dropmore Variety**—One of the best hardy perennials, growing 3 to 5 ft. high, and having long loose sprays of lovely forget-me-not-like flowers of a rich gentian blue. Is very free flowering, blooming over a long season. Pkt. 10c

## ALYSSUM

A fragrant hardy annual having the odor of honey and bearing spikes of small white flowers in great profusion throughout the winter, spring and summer. Without a doubt the best white border plant, is also useful for beds and baskets and will begin to bloom when quite small.

**Carpet of Snow**—Very compact, growing about three inches high, one plant often having a diameter of 15 inches. Pkt. 10c. 1/4 oz. 25c.

**Little Gem**—Grows 4 to 6 inches high. One of the finest for low beds and borders. Pkt. 10c. 1/4 oz. 25c.

**Sweet White**—The tallest of this group, growing 8 to 12 inches. A profuse bloomer. Pkt. 10c. oz. 30c.

**Lilac Queen**—A delicate lilac (dwarf). Pkt. 10c, 1/4 oz. 25c.

**Saxatile Yellow**—A perennial variety of pleasing yellow color. Height 1 ft. Pkt. 10c.

## AQUILEGIA (Columbine)

A hardy perennial of graceful habit growing about two feet high. The flowers are attractive and beautifully adapted for cut flowers. They may be successfully grown in partial shade. Fall sown seed will bloom the following spring. If sown in early spring will often flower the same season.

**Canadensis**—An improved variety of scarlet and yellow. Pkt. 10c.

**Coerulea (Rocky Mountain Blue Columbine)**—Fine deep blue and white; long spurs. Pkt. 15c.

**Long Spurred Hybrids Mixed**—For cut flowers these long spurred hybrids are unexcelled. Profuse blooms, of almost every shade, borne on long graceful stems, make this variety one of universal admiration. Pkt. 15c.

**Double Mixed**—Pkt. 10c.

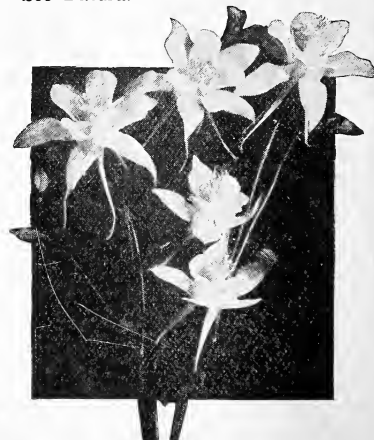
**Single Mixed**—Pkt. 10c.

## ANEMONE (Windflower)

**Giant French Single Mixed**—This lovely flower may be grown from seeds as well as bulbs. Our seed has been saved from an extra fine strain and contains a very choice mixture of colors. The seed may be sown in the fall or spring in the open ground. We suggest that the seed be covered lightly with sand, then spread a thin cloth over the bed and water through this. The plants form bulbs which should be given the culture as recommended in our bulb catalog. Pkt. 25c.

## ANGEL'S TRUMPET

See Datura.



Columbine

# A & M Snapdragons

## Antirrhinum

The Snapdragon is now one of the most popular flowers. It is easily grown from seed and may be sown practically the year round. They may be had in great variety of separate colors or you may plant the mixed for a brilliant array of color. Be sure to include these in your garden.

### Tall Large Flowering

This type grows about 3 feet tall, the flowers are large and the flower spikes long. Splendid for cutting and tall borders.

Silver Pink—A delicate silver pink. Pkt. 10c.  
 Rose Pink—Pkt. 10c.  
 Deep Rose—Pkt. 10c.  
 Garnet—A velvety, deep red. Pkt. 10c.  
 Scarlet—Bright red. Pkt. 10c.  
 Golden Yellow (Golden King)—Pkt. 10c.

Orange Shaded Scarlet—Pkt. 10c.  
 White (Queen Victoria)—Pure white—Pkt. 10c.

The above tall varieties are also offered in  $\frac{1}{4}$  oz.—35c.

Mixed—Including all the new colors. Pkt. 10c;  $\frac{1}{4}$  oz. 25c.

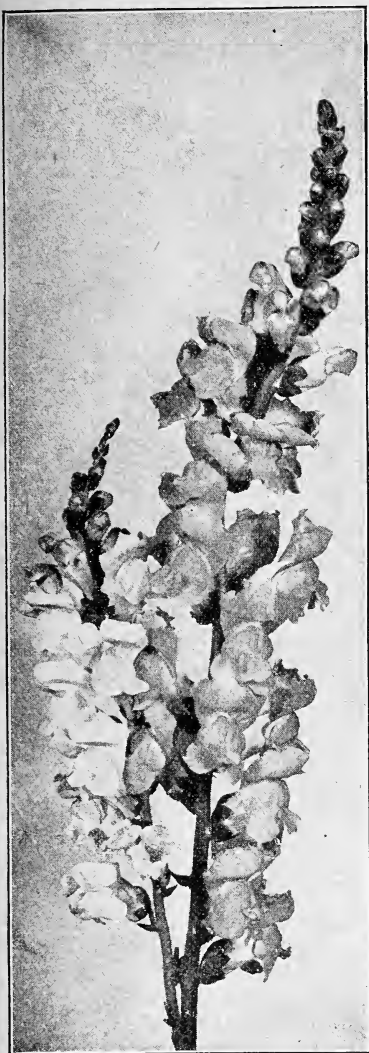
### Semi-Dwarf Large Flowering

The best for bedding and because of the large flowered compact spike is considered fine for cutting. Height about 18 inches.

Pale Pink—White tube. Pkt. 10c.  
 Silver Pink—Pkt. 10c.  
 Pink—Pkt. 10c.  
 Rose Pink—Pkt. 10c.  
 Rose—Pkt. 10c.  
 Shrimp Pink and Yellow (Prima Donna)—Pkt. 10c.  
 Scarlet (Defiance)—Pkt. 10c.  
 Crimson (Crimson Queen)—Pkt. 10c.

White (Queen of the North)—Pkt. 10c.  
 Golden Yellow (Golden Queen)—Pkt. 10c.  
 Rosy Lavender—Pkt. 10c.  
 The above separate colors  $\frac{1}{4}$  oz. 45c.  
 Semi Dwarf Mixed—Pkt. 10c,  $\frac{1}{4}$  oz. 35c.

Tom Thumb Mixed—An excellent mixture for edging. Height 10 inches. Pkt. 10c.



A & M Snapdragon



Arctotis Grandis

## AMARANTHUS

Hardy annuals, grown especially for their brilliant foliage.

**Caudatus (Love Lies Bleeding)**—Light yellowish-green foliage; long, drooping crimson flower spikes. Plants grow three feet high. Pkt. 10c.

**Sunrise**—The most brilliant variety, large bronze red foliage growing on branches from 3 to 6 ft. tall. The foliage at the end turning a brilliant scarlet. Pkt. 15c.

**Salicifolius or Willow-leaved**—This variety is like the above except that the foliage is fine, giving a drooping, graceful effect. Pkt. 10c.

**Tricolor (Joseph's Coat)**—The leaves of this variety are green, red and yellow. Pkt. 10c.

## AMMOBIUM

Hardy annual everlasting flowers. Pure white and very double. Pkt. 10c.

## AMPELOPSIS

**Quinquifolia (Virginia Creeper)**—A very popular climber. Hardy perennial. Seed may be sown any time of the year. During the summer the foliage is green, changing to various shades of bronzy red during the fall. Pkt. 10c.

**Veitchi (Boston Ivy)**—A valuable perennial climber which grows rapidly, clinging to brick and wood. The leaves are deep green, changing to scarlet in the fall. Pkt. 10c.

## ASPARAGUS FERN

**Plumosus**—A tender perennial for green-house or potted plant use, with long, fine, feathery foliage. The sprays when cut, retain their freshness in water from three to four weeks. Seeds start slowly and should be soaked in water before sowing. Pkt. 10c. 100 seeds 50c.

**Sprengeri**—A hardy variety. Used as a pot plant. Suitable in groups of potted flowers or in hanging baskets. Pkt. 10c. 100 seeds 45c.

## ARCTOTIS GRANDIS (African Lilac Daisy)

Large pearly white Marguerite-like flower, with delicate mauve center surrounded by a narrow golden band. The whole plant is covered with white down. Half hardy annual. Height 2 feet. Pkt. 10c.

## AUSTRALIAN PEA VINE (Dolichos Lignosus)

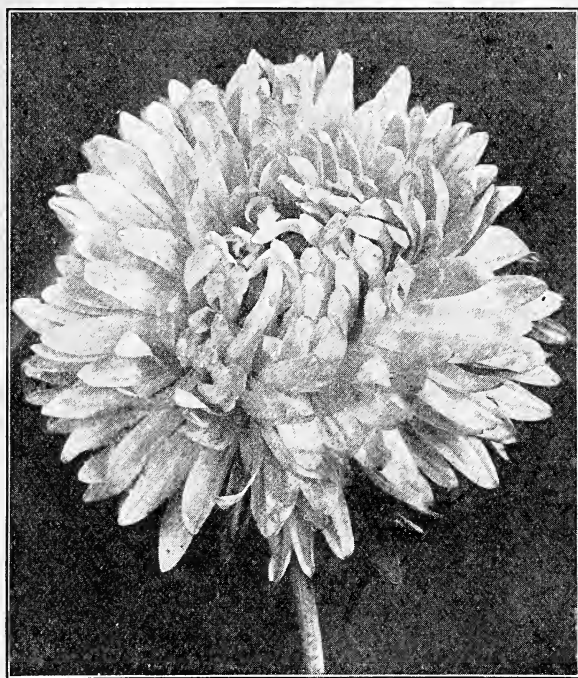
A rapid growing evergreen climbing perennial, flowering freely in large clusters of rose flowers. For covering arbors, trellises, etc., they have no superior. Pkt. 10c.

## AUTUMN GLORY

See Sunflower.

## A & M California Grown Asters

A popular half-hardy annual produced in a great variety of classes, and an almost endless number of colors. The tallest grow about two feet high, and some varieties of dwarfs are not over eight inches high. The best method of culture is to sow the seed in boxes and transplant when large enough to handle. The seed can be sown, however, in the row where the plants are to remain, thinning them from six to twenty inches apart, according to variety.



Aster—A & M American Beauty

### QUEEN OF THE MARKET

(Early Flowering)

One of the earliest blooming varieties, blossoming frequently in July. Of spreading habit, 12 to 15 inches high. Blossoms medium sized, and the petals curve outward. The best early variety for bedding or edging. Pkt. 10c, ¼ oz. 35c.

### GIANT BRANCHING COMET

(Late Flowering)

The plant grows 24 inches high and about 18 inches in width and the blossoms, which are large and full-petaled, are borne on long stems or branches.

Crimson .....	Pkt. 10c	Rose .....	Pkt. 10c
Rose Pink .....	Pkt. 10c	Royal Purple .....	Pkt. 10c
Shell Pink .....	Pkt. 10c	White .....	Pkt. 10c
Lavender .....	Pkt. 10c	Mixed .....	Pkt. 10c
Separate Colors, ¼ oz. 50c.		Mixed, ¼ oz. 45c.	

### AMERICAN BRANCHING

(Late Flowering)

An excellent variety, the plants are 2½ to 3 feet high and have a branching and vigorous growth. The flowers are well formed, being large, double and incurved.

Lavender .....	Pkt. 10c	Black Blue .....	Pkt. 10c
Purple .....	Pkt. 10c	Deep Rose .....	Pkt. 10c
Peerless Pink .....	Pkt. 10c	Crimson .....	Pkt. 10c
White .....	Pkt. 10c		

Separate Colors, Pkt. 10c. ¼ oz. 50c; Mixed, Pkt. 10c, ¼ oz. 40c.

### A & M KING ASTERS

(Late Flowering)

This variety is quite distinct. The flowers are large and very double, the petals being long and narrow and having a quilled appearance. It is a sturdy grower, a free bloomer and the flowers keep longer and ship better than any other variety.

Black Blue, deep purple .....	Pkt. 10c	Lavender .....	Pkt. 10c
Crimson .....	Pkt. 10c	Violet .....	Pkt. 10c
Deep Flesh .....	Pkt. 10c	White .....	Pkt. 10c
Rose .....	Pkt. 10c	Mixed .....	Pkt. 10c
Separate Colors ¼ oz. 50c—Mixed ¼ oz. 40c.			

### AMERICAN BEAUTY ASTERS

(Late Flowering)

This wonderful variety is a recent addition to the popular aster family. It is without doubt one of the grandest. The flowers have in-curved petals and are large and full, often measuring 4 inches across. The plants are of branching habit and the flower stems measure from 15 to 30 inches. The flowers have splendid keeping qualities. We heartily recommend this variety as one which you will be proud to have in your garden. We have a complete list of colors.

Azure Fairy, bright beautiful blue.....	Pkt. 25c
Peach Blossom, a pleasing combination of rose and light pink .....	Pkt. 25c
Carmine Rose .....	Pkt. 25c
Lavender .....	Pkt. 25c
September Beauty, shell pink .....	Pkt. 25c
Separate Colors ⅛ oz. 40c—Mixed ⅛ oz. 40c.	

### AMERICAN BEAUTY ASTERS

(Early Flowering)

This newest type has been developed from the late flowering American Beauty and has all of its characteristics, except that it is much earlier flowering. This makes possible a long flowering season for this splendid variety.

Early Rose .....	Pkt. 25c
Early Purple .....	Pkt. 25c

### OSTRICH FEATHERED ASTERS

(Mid-Season Flowering)

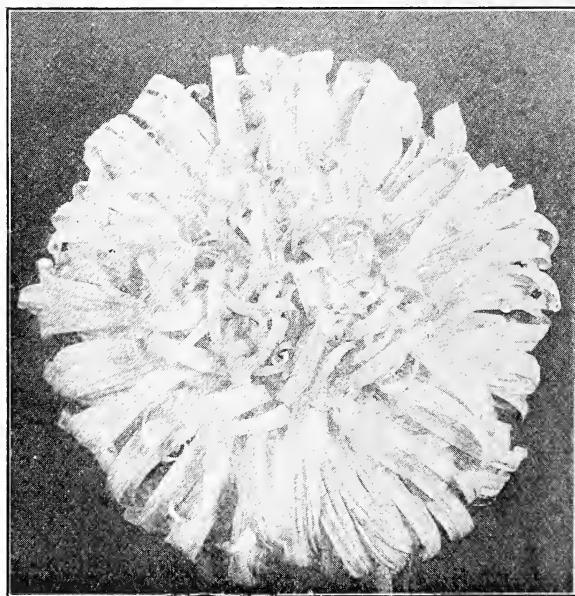
Extremely graceful Aster, with large, loose, feathery heads, unrivaled for table decoration, flowers double and semi-double. The branching habit makes this a conspicuous border plant. Height 18 inches.

Crimson .....	Pkt. 10c	Light Blue .....	Pkt. 10c
Rose Pink .....	Pkt. 10c	White .....	Pkt. 10c
Dark Blue .....	Pkt. 10c	Rose .....	Pkt. 10c
Shell Pink .....	Pkt. 10c	Mixed .....	Pkt. 10c

Separate Colors, ¼ oz. 60c. Mixed, ¼ oz. 55c.

### COLLECTION

One packet each of Queen of the Market, American Beauty, King and Ostrich Feathered.....50c



Aster—A & M Ostrich Feather

# A & M ASTERS—Continued

## HEART OF FRANCE

Heart of France—A rich dark red. The richest, most striking color and not to be found in any other aster. The plants grow about 2 feet high and are of a branching habit. Pkt. 25c.

## DWARF BOUQUET

A & M Dwarf Bouquet—A compact and free flowering variety which is admirably adapted for edging and carpet bedding. Height 1 ft. All colors mixed. A strain recommended as a border variety, being exceptionally dwarfed. Pkt. 10c.

## MIGNON or POMPON

A & M Mignon (Pompon)—One of the faintest and most attractive varieties of Asters. The bright colored flowers are small, about  $\frac{3}{4}$  to 1 inch in diameter and are produced in great profusion. Excellent for cutting and bedding. Mixed. Pkt. 10c.

Lavender—Pkt. 10c.  
Rose—Pkt. 10c.

## A & M QUILLED

A & M Quilled—An old favorite which has become popular again. The quilled petals give a pompon effect and the

flowers often measure 3 inches across. Its keeping qualities excel all other varieties. A variety which retains its bloom and color beyond the time of other popular sorts. Mixed. Pkt. 10c.

## SINGLE ASTERS

A & M Single Asters—Single Asters make splendid bedding, border and cut flowers. They resemble daisies, and in this mixture are shades of pink, blue, lavender, rose. The flowers keep well in water when cut. Mixed. Pkt. 10c.

We also carry the following separate colors:  
Scarlet Dark Blue Lavender  
Pkt. 10c each.



A & M Balsam

## BALSAM (Touch-Me-Not)

A tender annual, with brittle stems and foliage. Flowers both single and double, in bright colors and variations are wax-like and very attractive. The individual blossoms floating in a dish of water exhibit their beauty to the best advantage.

Improved Double Camellia Flowered—In its extraordinary size, perfect form and brilliant colors, this fine strain of balsams surpasses all others. Height 18 inches. Pkt. 10c.

Rose Flowered—Handsome double flowers in form resembling a rose. Height 18 inches, fine mixed. Pkt. 10c.

Spotted—Large semi-double flowers well adapted for borders, fine mixed colors. Pkt. 10c.

## BRACHYCOME IBERDIFOLIA (Swan River Daisy)

A charming annual deserving greater popularity. The plants, which grow about 10 inches high, are covered with Cineraria-like blooms in shades of blue and lavender. Mixed—Pkt. 10c.

Send for A & M Fall Bulb Catalog ready about August 15th.

## BARTONIA AUREA

A showy California annual. Lovely large golden yellow flowers which glisten like satin in the sunshine. The height is about 18 inches, making them very desirable for bedding and cutting. Pkt. 10c.

## BEGONIA SEMPERFLORENS

Very attractive flower for both pot and bedding use and should be more extensively grown for shady borders. Perennial. Pkt. 25c.

## A & M DOUBLE DAISY (Bellis Perennis)

A hardy perennial, blossoming freely all spring and summer. Plant is about four inches high and is valuable for borders.

Extra Double Red—A variety of more recent introduction. Pkt. 15c.

Snowball—A clear, extra double white variety. Pkt. 15c.

Extra Double Pink—A beautiful shade of pink. Pkt. 15c.

Double Mixed—Pkt. 10c.

## BALLOON VINE (Love-in-a-Puff)

Climbing annual, with small flowers. The seed pods are curiously swelled or puffed and are quite attractive. Pkt. 10c.

## BALSAM APPLE, BALSAM PEAR (Momordica)

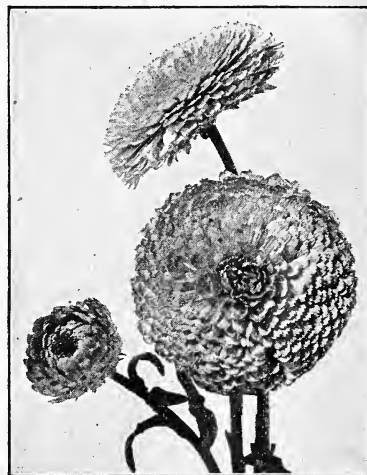
A climbing annual, growing about 10 feet long. Has graceful and ornamental foliage, yellow flowers and warted golden yellow fruit, with large carmine red seeds. Balsam Apple and Balsam Pear are climbers which thrive in hot locations, and are much planted around Bakersfield. Pkt. 10c. each.

## CANDYTUFT (Iberis)

A hardy annual, growing about 12 to 18 inches high, according to the variety. The blossoms are borne on umbels, and the newer varieties are quite large, flowering and very fragrant. Of easy culture and valuable for bedding or massing. Crimson Pink White Lilac  
Flesh Color Rose Cardinal Mixed  
Pkt. 10c. Separate colors, oz. 40c. Mixed, oz. 30c.

Giant White Hyacinth Flowered—A giant Candytuft, bearing immense snowy white spikes, which often measure 10 inches or more. Don't fail to give this a trial. Pkt. 10c.

Coronaria Empress—Large trusses of pure white flowers, one of the finest candytufts yet raised. Pkt. 10c.



Calendula—A & M Orange King

## A & M CALENDULA

Very hardy annual, one foot high, blooming freely practically the whole year round. It is one of the easiest culture and is desirable for rather inferior soils, where less sturdy flowers do not thrive. Calendulas make one of our finest winter flowers. A hard frost will not hurt them. In fact, the flowers are larger and finer during the winter and spring months.

Orange King (New)—Bears giant flowers sometimes 3 inches in diameter. Color pure orange. Pkt. 10c.  $\frac{1}{2}$  oz. 25c.

Lemon Queen—Like the above, but of pure lemon. Pkt. 10c. oz. 25c.

Favorita—Large fine flowers of deep cream with the petals edged yellow. Pkt. 10c. oz. 30c.

Double Mixed—A good mixture of 8 or 10 different shades of yellow and orange; some clear colors and some shaded and striped. Pkt. 10c. oz. 25c.

## CANNA

A perennial growing 3 to 6 feet high. Suitable for bedding and back grounds. Plants have bright flowers and ornamental leaves. Soak seed in tepid water several hours before planting.

Crozy's Varieties—New large-flowered and free blooming variety. Height 3 ft. Mixed. Pkt. 10c.

Good Mixed—Height 5 to 6 ft. Mixed, Pkt. 10c.

## CALLIOPSIS

These will grow luxuriantly in any situation and are most useful, affording a constant supply of richly marked flowers for cutting. All varieties are annuals. The tall varieties often reach a height of three feet. The dwarf varieties make splendid borders and low beds, forming round compact bushes which are literally covered with bloom.

**Crimson King**—A rich deep crimson. Height 8 to 10 inches. Pkt. 10c.

**Golden Wave (Drummond)**—Large, rich, golden yellow flowers with chestnut-brown centers produced in abundance. Height, 18 inches. Pkt. 10c.

**Tiger Star Mixed**—The flowers are star shaped of rich red color; the end of each petal is spotted with golden yellow. Height 8 to 10 inches. Pkt. 10c.

**Dwarf Bicolor Mixed**—A splendid mixture of all the attractive varieties of this class. Pkt. 10c, 1/2 oz. 25c.

**Tall Single Mixed**—Contains all the choice tall single varieties. Pkt. 10c. oz. 30c.

**Tall Double Mixed**—These double and semi-double flowers have a graceful charming appearance. Pkt. 10c. 1/2 oz. 25c.

## CANARY BIRD FLOWER (Tropaeolum-Canariense)

A tender, climbing annual of the nasturtium family. Blossoms have curiously winged petals and are light yellow. Pkt. 10c.

## CALIFORNIA POPPY

See Eschscholtzia.

## CARDINAL CLIMBER

A new annual climber of great merit, bearing a mass of small crimson flowers. Height 10 to 15 feet. Pkt. 15c.

## CASTOR OIL BEANS

See Ricinus.

## A & M CANTERBURY BELLS

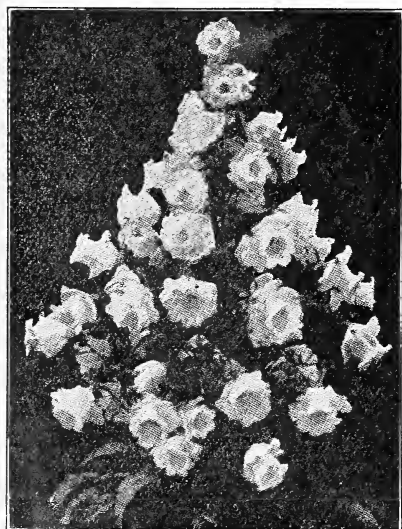
**Campanula Medium**—A hardy biennial, blooming the second year from seed, or the first if sown early. Grows about three feet high.

Single Blue  
Single White  
Single Rose  
Single Mixed

Pkt. 10c. Double Mixed—Pkt. 15c.

**Calycanthema**—A variety of Canterbury Bells having large semi-double flowers each resembling a cup and saucer.

Calycanthema Rose ..... Pkt. 15c  
Calycanthema White ..... Pkt. 15c  
Calycanthema Purple ..... Pkt. 15c  
Calycanthema Mixed ..... Pkt. 15c



Canterbury Bells



Chabaud's Carnation

## CARNATION

Our strain of these popular flowers is unsurpassable in beauty and variety of coloring; also in their delightful fragrance. Seed should be sown in pots or boxes and when 2 to 3 inches high, may be transplanted to the open bed or border, giving shade until the young plants have become established. Sow any time between March and September.

**Chabaud's Everblooming French Mixed**—A very popular strain, easily raised from seed, producing beautiful double flowers. Pkt. 15c.

**Grenadin Red**—Double scarlet flowers. Pkt. 10c.

**Marguerite White**—Double white. Pkt. 10c.

**Deep Red (Black King)**—Pkt. 15c.

**Pink**—Silvery light pink. Pkt. 15c.

**Bright Salmon Pink**—Pkt. 15c.

**Yellow**—Yellow and yellow grounded picotees. Pkt. 15c.

**Marguerite, Mixed**—Colors—This assortment gives a large percentage of fine double flowers. Pkt. 10c. 1/4 oz. 50c.

## CENTAUREA CYANUS (Corn Flower or Bachelor's Button)

This old fashioned hardy annual is still a great favorite for cutting purposes. The deep rich blue is the most popular. The mixture contains shades of pink, white, lavender and blue.

**Double White (New)**—This is offered for the first time this year. It is absolutely pure white and is very double. A splendid cutting flower. Pkt. 15c.

**Double Blue**—A pleasing shade of blue but of much more substance than the single kind. Height 2 to 3 feet. Pkt. 10c. 1/2 oz. 35c.

**Double Pink**—Bright pink. Pkt. 10c.

**Double Mixed**—Pkt. 10c, oz. 40c.

## CENTAUREA IMPERIALIS (Royal Sweet Sultan)

This is the variety so popular in the florist's store. The plants are of spreading habit and one plant has been known to keep a home replenished with cut flowers during the entire summer. Height, 3 to 4 feet. A hardy annual.

White Lavender Rose  
Purple Red (Amaranth) Mixed  
Pkt. 10c. Separate colors, 1/4 oz. 35c.  
Mixed, 1/4 oz. 25c.

**Suaevolens Yellow**—Similar to Imperialis but producing yellow flowers. Pkt. 10c. 1/4 oz. 35c.

## CELOSIA PLUMOSA (Feathered Cockscomb)

**Plumosa Mixed**—A very fine selection of the popular feathered Celosia containing many pleasing shades of color varying from pale yellow to the deepest crimson. Pkt. 10c.

## CELOSIA CRISTATA (Cockscomb)

Very ornamental and strong plants, producing magnificent combs of velvety looking flowers. They succeed well in the garden and make very attractive pot plants. Annual.

**Dwarf Empress**—A handsome strain, large and compact heads; color, splendid crimson. Height 10 inches. Pkt. 15c.

**Dwarf Yellow**—A variety producing flowers of an attractive hue. Pkt. 10c.

**Dwarf Mixed**—A mixture of rich velvety colors. Height 10 inches. Pkt. 10c.

**Tall Crimson**—Brilliant crimson combs borne on stems about 2 ft. tall. Pkt. 10c.

**Tall Mixed**—Contains shades of crimson and yellow. Height 2 ft. Pkt. 10c.

## CELOSIA CHILDSII (Woolflower)

A new annual of great merit. As the name suggests, the flower resembles huge balls of wool. When cut, if it is hung head down until dry, makes a beautiful everlasting flower. Height 15 inches.

**Dark Pink (New)**—Pkt. 25c.

**Yellow (New)**—Pkt. 25c.

**Crimson**—Pkt. 15c.

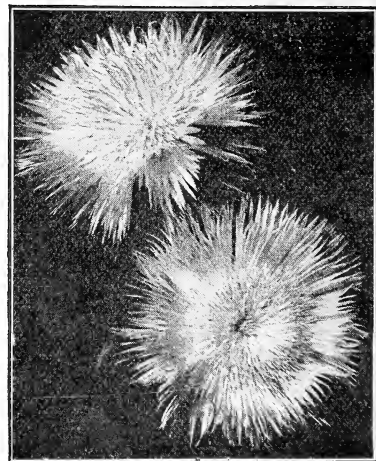
**Mixed**—Pkt. 15c.

## CELOSIA CHRYSANTHEFLORA

This is a new variety of Celosia obtained by crossing different species. The heads are very full and large and may be cut and dried as an everlasting flower. They are much admired for their velvety appearance and varied colors. Celosias are easily grown from seed which should be sown in the spring. Pkt. 25c.

## CENTAUREA CANDIDISSIMA

**True Dusty Miller**—Broad silvery white foliage; useful for edging. Height 12 inches. Pkt. 10c.



Centaurea Imperialis





Delphinium—Gold Medal Hybrids

### COBAEA SCANDENS (Cup and Saucer Vine)

A perennial climber of rapid growth; very valuable for covering trellises, arbor, trunks of trees, etc. Will cling to any rough surface, often attaining a height of 30 to 40 feet in one season.

The large, bell-shaped flowers are very attractive.

Scandens Alba—White flowers. Pkt. 10c.  
Scandens Purpura—Purple flowers. Pkt. 10c.

### COLEUS

These ornamental foliage plants are very popular for growing in protected borders or for pot culture. They are tender perennials but make a satisfactory growth from seed the first year. A very interesting plant to grow from seed, for many new and fine color combinations are obtained in this way.

Extra Choice Mixed—Pkt. 25c.  
Choice Mixed—Pkt. 15c.

### COIX LACHRYMAE (“Job’s Tears”)

Curious ornamental grass with broad corn-like leaves and seeds of a light slate color. Valuable for winter bouquets with everlasting flowers. Strings of handsome beads are made from the seeds. Hardy annual; three feet high. Pkt. 10c. oz. 30c.

### DATURA (Trumpet Flower)

Handsome ornamental annuals with large showy flowers. Grows to a height of 3 feet, will flower continuously throughout the summer. Pkt. 10c.

## DELPHINIUM (Perennial Larkspur)

Beautiful, hardy border perennials with noble spikes of handsome flowers; very useful for cut flowers, etc. Sow in the spring or early fall in seed beds or boxes and transplant when large enough.

### Belladonna

A lovely turquoise blue, which is a continuous bloomer. Splendid for cutting. This is the tall Delphinium so often seen in beds and borders and as cut flowers in the florist shops. Pkt. 25c.

### Bellamosa

A rich deep blue in color and of the same type and habit of growth as the Belladonna. The two grow beautifully together. Pkt. 25c.

### Cardinale

Scarlet perennial Larkspur. This handsome native flower grows to a height of 4 feet or more and produces its brilliant flowers during the early summer months. Pkt. 15c.

### Chinensis Azure Fairy

A lovely azure blue Delphinium flowering from the seed the first season if the seed is sown in early spring. The height is twelve to eighteen inches. May be used for bedding, borders and cut flowers. Pkt. 10c.

### Chinese Blue Butterfly

A fine dark blue of the same type as Azure Fairy with which it is often grown. Pkt. 10c.

### Gold Medal Hybrids

The finest hybrids to be found in Delphinium and all the lovely blues, lavenders and mauves are in this mixture. The plants are vigorous growers, producing tall, handsome spikes. Pkt. 15c.

### Fine Mixed

A very pleasing mixture which blooms the first year from seed sown in the early spring. Pkt. 10c.

### CYCLAMEN

A tender, bulbous perennial, used in greenhouses and window gardens. It is easily grown from seed. Sow in the fall or early spring.

Bright Salmon—Pkt. 35c.  
Bright Red—Pkt. 35c.  
Deep Red—Pkt. 35c.  
Light Salmon—Pkt. 35c.  
Rose—Pkt. 35c.  
White—Pkt. 35c.  
Extra Choice Mixed—Pkt. 35c.  
Butterfly Mixed, Fringed Petals—Pkt. 35c.



Shasta Daisy



Dimorphotheca Aurantiaca

### DIMORPHOTHECA (The Golden African Daisy)

A showy annual from South Africa which has become a great favorite on account of its easy culture and beautifully colored flowers. The colors include all shades of yellow, orange, cream and white and massed in beds or wide borders they have a very brilliant effect. They may be planted during the fall, spring or summer.

Aurantiaca—Brilliant orange. Pkt. 10c.  
Hybrids—Mixed Colors. Pkt. 10c.

### CYPRESS VINE (Ipomea Quamoclit)

A tender climbing annual with fern-like foliage and small star-like red or white flowers. A beautiful vine for growing in porch boxes, hanging baskets, etc., or for covering trellises. Soak the seed 3 hours before planting. Mixed Pkt. 10c.

### CUPHEA

Mineata Hybrids Mixed—A half hardy perennial which is useful for making permanent borders. The small tubular flowers are crimson scarlet and orange. Height, 1 ft. Pkt. 10c.

### DAHLIA

Although not generally known Dahlias are easily grown from seed. If planted early in a hot bed and transplanted when danger of frost is past they will bloom the first season and make large bulbs by the next fall.

Cactus—Our mixture contains many of the recent novelties. Giants with pointed petals.

Extra Choice Mixed—Pkt. 25c.  
Double—Choice mixed colors in great variety and flowers of excellent form. Pkt. 15c.

Single Mixed—Seed saved from the choicest varieties. Pkt. 10c.

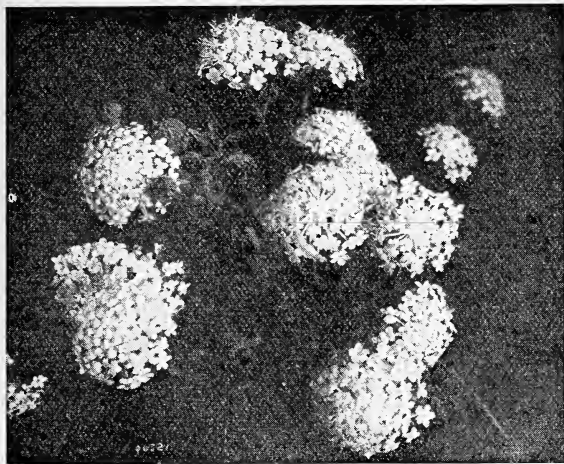
Pompon Mixed—The small double dahlias so much prized for cutting. Pkt. 15c.

All Varieties Mixed—Pkt. 15c.

### SHASTA DAISY

This popular flower has been much improved and the Alaska is the finest of all. The Shasta Daisy is noted for its keeping qualities as a cut flower. They should be planted in the fall or early spring. If planted in late fall will not bloom until the following spring.

Alaska—The finest. Pkt. 15c.  
Ordinary—Pkt. 10c.



Didiscus—Blue Lace Flower

**DIGITALIS (Foxglove)**

A hardy perennial, blooming the second year from seed. Grows usually about 3½ feet, although in very rich soil sometimes 6 feet. The bell shaped flowers are borne on long spikes, and come in shades of purple, lavender, rose and white, all spotted lightly inside the blossom. Thrives best in cool, shady locations. Fine Mixed—Pkt. 10c.

**DOLICHOS OR HYACINTH BEAN**

Tender, climbing annual. Grows rapidly and is valuable for covering a trellis. Flowers in purple and white. Sow seed in open ground late in April. Mixed—Pkt. 10c.

**DUSTY MILLER**

See Centaurea Candidissima.

**DIDISCUS COERULEUS  
(Blue Lace Flower)**

This beautiful lace flower is a very attractive cut flower of a lovely blue shade and is most effectively used when mixed in bouquets. The culture is easy and being a hardy annual may be planted from early spring to late summer. If you like to raise your own cut flowers you will be glad to have this in your collection. Pkt. 15c.

**DIANTHUS OR PINKS**

Hardy annuals, about 1 foot high, and bearing beautifully colored single and double blossoms in profusion all summer. Sow seed early in boxes and transplant, or sow in rows where the plants are to remain, and thin. They are largely used for border, massing in beds and for cutting. There is a wide range of colors from purest white through all shades of pink to deepest red.

**Double Annual**

Chinensis Double Mixed, Pkt. 10c.  
Heddewigi, Double Mixed, Pkt. 10c.

**Single Annual**

Heddewigi, Single Mixed, Pkt. 10c.

**Perennial**

Plumarius (Grass Pink)—A hardy perennial pink used for borders and cutting and producing a constant bloom of flowers of varied hues.

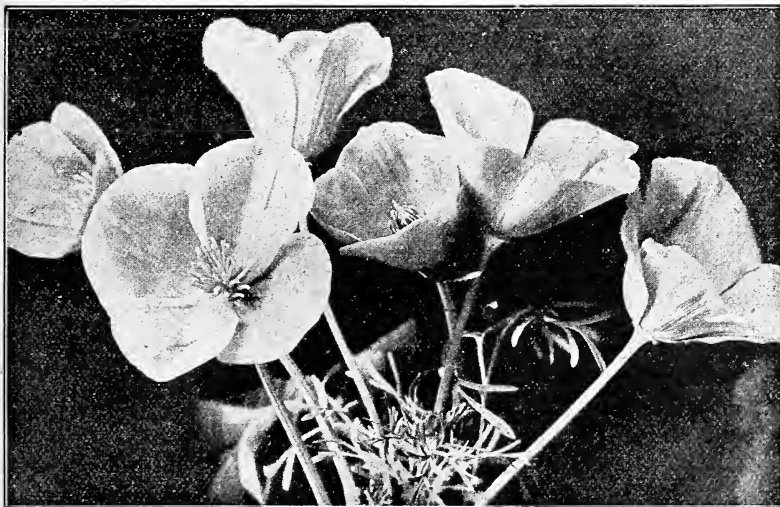
Double Grass Pink, Mixed. Pkt. 10c.  
Single Grass Pink, Mixed. Pkt. 10c.

**EVERLASTING FLOWERS**

See Acroclinium, Ammobium, Gomphrena, Helichrysum, Statice, Rhodanthe, Xeranthemum.

**COLLECTION**

One packet each Acroclinium Rosea, Ammobium, Gomphrena Mixed, Helichrysum Mixed, Statice Perezii, Rhodanthe and Xeranthemum. Special 50c.

**A & M CALIFORNIA POPPY**

Eschscholtzia California Poppy

**ESCHSCHOLTZIA  
(California Poppy)**

Hardy annual. Seed may be sown from October until April. Fall sown seed will bring large early flowers.

Some wonderful new varieties have been produced recently. Remarkable color combinations which make striking beds and splendid cut flowers. California Poppies have a long blooming season which may be prolonged by cutting off the seed pods.

**Standard California Poppies**

- California Yellow—Bright yellow. Pkt. 10c.
- California Deep Orange—True California Poppy. Pkt. 10c.
- California White—A re-selected pure white. Pkt. 10c.
- California Golden West—Yellow with orange center. Pkt. 10c.
- California Crimson—Carmine Crimson. Pkt. 10c.
- California Chrome Queen—Amber yellow. Pkt. 10c.
- California Mixed—Pkt. 10c.

**NEW COLORS IN CALIFORNIA POPPIES**

**Orange Flame**—Vivid orange-scarlet and most striking of all the new colors. The plants are very erect and compact and would do for borders. Pkt. 25c.

**Ballet Girl**—The outside of the petals is an intense carmine, the inside a light cream, making a contrast of colors both beautiful and startling. Pkt. 25c.

**Tango**—A bronzy red overlaid terra cotta. This variety was introduced recently and found immediate favor. Pkt. 25c.

**Mauve Beauty**—An entirely new color. Is a beautiful shade of pure mauve. Pkt. 25c.

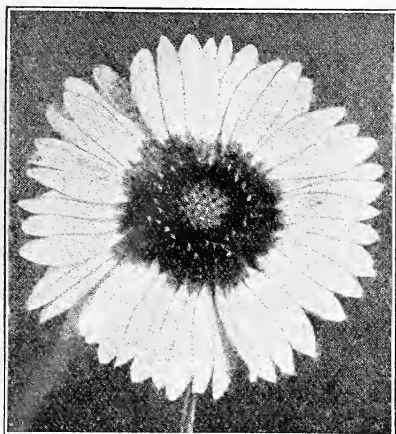
**Lovely**—True to its name this variety is a bright rose pink suffused with salmon. The blooms have a satiny appearance which adds much to their loveliness. Pkt. 25c.

**The Geisha**—The inside of the petals is a brilliant gold and the outside orange-crimson. The petals are fluted, which makes the open flowers very attractive. Pkt. 25c.

**Scarlet Beauty**—The brightest color of all, being a deep scarlet and as the plants are erect and the flowers large it gives the effect of vivid scarlet tulips. Pkt. 25c.

**Extra choice mixed**—Contains the above, also many other of the newer colors. Pkt. 15c.

Collections of the above seven named and one mixed variety, \$1.50.



Gaillardia Grandiflora

**EVERLASTING PEAS**

See Lathyrus Latifolius.

**FLAX**

See Linum.

**FLOWERING SAGE**

See Salvia.

**FOUR O'CLOCK (Mirabilis)**

Also called Marvel of Peru. A hardy annual of easy culture, growing about 2 feet high. The plant is free flowering, bearing blooms of a great variety.

Mixed—Pkt. 10c.

**FOXGLOVE**

See Digitalis.

**FORGET-ME-NOT**

(Myosotis)

A hardy perennial with small blue star-like flowers borne in clusters on long stems. Will bloom the first year if sown early and does best if sown in a box and then transplanted to a cool moist situation.

**Alpestris Tall**—Light blue flowers, strong, long stems and vigorous growers make this a popular variety. Pkt. 10c.

**Victoria Dwarf**—Large flowers; bright azure blue with yellow center; plant symmetrical, dwarf and strong grower. Pkt. 10c.

**FREESIA**

These dainty little popular flowers may be grown from seeds or bulbs. They flower very early in the spring and are one of the most delightfully fragrant flowers in cultivation. Freesias are easily grown from seeds and will bloom the following spring if sown in the fall.

**Purity**—White. Pkt. 10c.

**Hybrid Ragionieri (Rainbow)**—A pleasing mixture of pastel shades. Pkt. 25c.

**GERANIUM**

A half-hardy perennial, flowering the first year from seed if sown early. A gorgeous flower of numerous shades of color; bearing continuously renders this one of the most popular plants grown.

**Choice Varieties Mixed**—This choice mixture includes many of the newest and finest sorts. Pkt. 25c.

**Lady Washington Mixed**—A very popular variety of geranium. The flowers are particularly beautiful. It is very interesting to grow from seed, many extra choice varieties are often obtained. Pkt. 25c.

**GEUM**

A beautiful hardy perennial producing flowers in profusion from spring till fall. It is an excellent cut flower, having long stems and keeping well.

**Mrs. Bradshaw's Double Red**—Large bright orange-scarlet double flowers. Pkt. 15c.

**GERBERA**

(Jamesonii Hybrids)

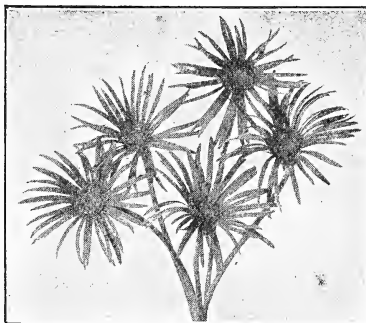
Large daisy-like blossoms with flower stems rising to a height of about two feet. Is also called Transvaal Daisy. Colors range from white to crimson, pink, rose, yellow and lilac shades. Flowers both summer and winter. Start carefully under glass and grow in a sandy, well drained soil if possible. Pkt. 25c.

**GAILLARDIA**

Beautiful show plant, remarkable for the profusion, size and brilliancy of its flowers, continuing in bloom from early summer till late in the fall. Excellent for beds, borders, or for cutting. Height 18 inches.

**Grandiflora**—Single perennial variety of varying shades of reddish brown and yellow. Pkt. 10c.

**Picta Lorenziana Double Mixed**—Large heads of bright yellow and red flowers. Very double, with quilled petals, suitable for bouquets. Pkt. 10c.



Gerbera

**GLOXINIA**

A superb house or greenhouse plant with large, bell-shaped flowers produced in the richest colors. The seed is very fine and must be handled with great care but the plants form bulbs which will blossom freely each season for several years.

**Extra Fine Mixed**—An unsurpassed mixture containing the finest spotted hybrids and best self colors. Pkt. 50c.

**GODETIA**

A hardy annual, very valuable for bedding and borders. For mass effects in shades of rose, red or pink it is unexcelled. The satiny cup-shaped flowers cover the compact-growing plants. The seed should be sown in the fall or early spring.

**Dwarf Single Mixed**—Height 10 to 15 inches. Pkt. 10c.

**Tall Single Mixed**—Height 18 to 24 inches. Pkt. 10c.

**Tall Double Mixed**—A new variety of Godetia of a tall branching habit of growth. The flowers are borne in great profusion along the stems and have the same satiny luster of the single kind. Are very attractive when used as cut flowers. A choice mixture. Pkt. 10c.

**GOMPHRENA**

Entirely different in appearance from any other everlasting flower, and very attractive. Has a globe-shaped flower resembling a clover blossom which when cut and dried holds its shape and color well.

Mixed Pkt. 10c., 1/2 oz. 25c.

**GYPSOPHILA**

(Baby's Breath)

A hardy annual of easy culture. Grows two or three feet high, and bears a profusion of small star-shaped white or pink flowers.

**Elegans Grandiflora**—Annual white. Very largely grown by florists for use in bouquets. Pkt. 10c., oz. 25c.

**Elegans Carmine**—A recent introduction of a deep carmine. Pkt. 10c., oz. 30c.

**Paniculata**—Fine for bouquets; white flowers, perennial. Pkt. 10c.



Gypsophila Elegans

**A & M HOLLYHOCKS**

A hardy perennial of upright, stately growth, five to eight feet high, unequaled for a background or covering ugly places. The seed may be sown in the fall and will bloom the following spring. If sown in the early spring many will flower in the summer. The seed is generally sown in seed beds and transplanted where they are to grow. The following are the finest double flowering varieties.

Double Maroon—Deep red. Pkt. 10c.  
 Double Scarlet—Pkt. 10c.  
 Double Rose—Pkt. 10c.  
 Double Newport Pink—Bright pink. Pkt. 10c.  
 Double Yellow—Pkt. 10c.  
 Double White—Pkt. 10c.  
 Double Mixed—Pkt. 10c.  
 Perennial Single Mixed—Pkt. 10c.

**Allegheny**—This unique and beautiful variety produces semi-double flowers about 3 inches across. The petals are crinkled and fringed like crumpled and slashed satin. Pkt. 10c.

**Annual Single Mixed**—A recent introduction in hollyhocks. This fine single mixture if sown in the spring will flower the first year. Pkt. 10c.



Helichrysum

**HELICHRYSUM  
(Straw Flower)**

A free-flowering, hardy annual, growing four or five feet high and bearing beautiful straw-like flowers in a great variety of shades and colors. The following are the most popular strains of this well-known flower offered in separate colors:

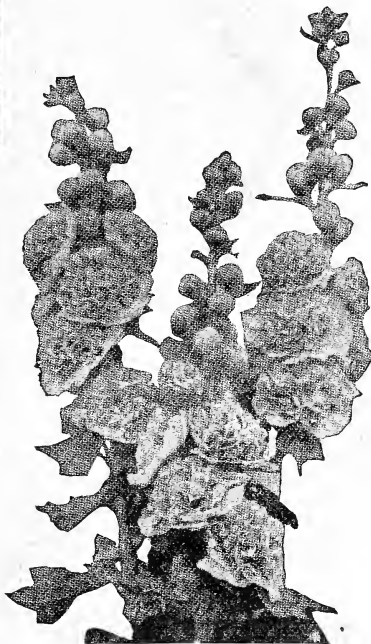
Canary Yellow—New. Pkt. 10c.  
 Salmon—A bright salmon pink. Pkt. 10c.  
 Silver Globe—A glistening white. Pkt. 10c.  
 Golden Ball—Deep golden yellow. Pkt. 10c.  
 Fireball—Bright scarlet. Pkt. 10c.  
 Violet—Pkt. 10c.  
 Separate Colors— $\frac{1}{4}$  oz. 25c.  
 All Colors Mixed—Pkt. 10c.  $\frac{1}{2}$  oz. 35c.

**HELIANTHUS**

See Sunflower.



Hunnemanna



A &amp; M Double Hollyhock

**HUNNEMANNIA  
(Bush Eschscholtzia)**

Known also as the Mexican Tulip Poppy. An erect-growing, tender perennial, about 2 ft. high. Foliage fine-cut, blossoms beautifully cup-shaped, bright yellow and about three to four inches across. Stems, long and smooth. Unlike the average poppy, Hunnemanna will keep for several days in water and makes a splendid cut flower. Pkt. 10c.

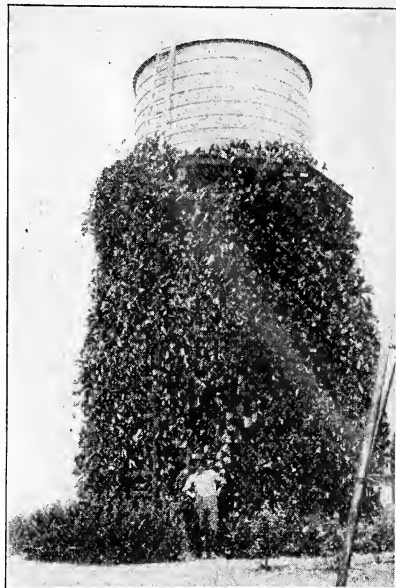
**HELIOTROPE**

A half-hardy perennial growing four to eight feet high. Small flowers, borne in graceful clusters and very fragrant. Blooms the first season from seed if sown early. Forms a large plant and requires a roomy situation.

**Finest Mixed**—A mixture of the best types in shades of white, mauve and purple. Pkt. 10c.

**KENILWORTH IVY**

An attractive little perennial trailing plant, very useful for baskets, pots and rock work. Pkt. 10c.

Kudzu Vine (Pueraria Thumbergiana)  
2 Years Old**KUDZU VINE  
(Pueraria Thumbergiana)**

One of the most rapid growing vines known, often making 40 feet in a season. It may be trimmed frequently for stock feed. All kinds of animals eat it readily, especially good for milch cows and goats. The seed is slow in germinating and should be punctured or soaked over night in warm water. Pkt. 10c.

**KOCHIA (Summer Cypress)**

**Childs Improved**—A splendid ornamental annual plant, forming dense oval bushes, 2 to 4 feet high, of small feathery light green foliage. As summer advances this changes to a carmine hue and finally to a fiery red. A very attractive plant at all times. Also called "Burning Bush." Pkt. 10c. oz. 25c.

**HUMULUS (Japanese Hop)**

A rapid growing ornamental climber covering arbors, trellises, etc. in one season. The foliage resembles the common Hop and is very luxuriant, making a dense vine. Will stand extreme heat and remain green until frost. An annual.

**Japonicus**—Green foliage. Pkt. 10c.  
**Japonicus Variegatus**—Beautifully splashed and striped with silver. Pkt. 10c.

**IPOMOEA**

Splendid rapid growing climbers. The flowers are beautiful and varied and resemble giant Morning Glories. The foliage is luxuriant and makes a growth of 10 to 30 feet a season. The seed of several varieties, especially the moon flower, should have the outer shell punctured and then soaked in water for twelve hours or more to germinate it.

**Coccinea**—Brilliant scarlet flowers with small foliage. Pkt. 10c.

**Bona Nox (Evening Glory)**—Fragrant violet flowers, expanding in the evening. An annual. Pkt. 10c.

**Grandiflora Alba (White Moonflower)**—Large white fragrant flowers which expand at night and early morning. Annual. Pkt. 10c.

**Heavenly Blue**—Sky blue flowers and one of the most attractive of Ipomoeas. An annual. Pkt. 10c.

**Leeri**—Large deep blue flowers expanding at night. A perennial vine sometimes called Blue Moonflower or Blue Dawnflower. Pkt. 10c.

**JOB'S TEARS**

See Coix Lachrymae.

# A & M LARKSPUR

(Tall Double Stock Flowered)

Are the finest strains and produce a wonderful show in any garden. The double flowering varieties, with their long spikes, are excellent for cut flowers. They should be planted in beds, or as a back ground for other small plants. With the great variety of colors one may carry out most any color scheme desired, and the bright shades will add a touch of beauty to the garden that will be a pleasure to note. They are easily grown and we know of nothing that will produce a greater show. By all means include a general assortment of A & M Larkspur in your garden for early spring blooming.

**Lustrous Carmine**—The glowing color, large individual flowers set closely together in a spike and long graceful stems makes this an ideal cut flower. A recent introduction. Pkt. 10c.

**Exquisite Pink**—An entirely new color in Larkspur being a lovely bright pink. It holds its color well and has all the fine qualities of tall double larkspur. The supply of seed is quite limited. Pkt. 25c.

**Light Blue**—A clear light ageratum blue. Pkt. 10c.

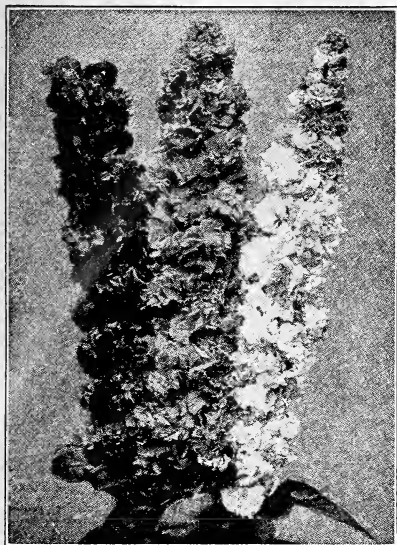
**Dark Blue**—A rich deep blue. Pkt. 10c.

**Rose**—A soft rose pink. Pkt. 10c.

**Lilac**—A soft lilac. Pkt. 10c.

**White**—An improved pure white. Pkt. 10c.

**Mixed**—A Choice mixture. Pkt. 10c.



A & M Larkspur Mixed

## LANTANA

A tender perennial. The plants become shrubs either large or small according to variety. They are used for borders, hedges and specimen plants, and bear verbena-like clusters of flowers. The mixtures which we offer contain scarlet, orange, white, yellow, rose and other colors. We do not have separate colors.

**Choice Tall Mixed**—Height 3 to 5 feet. Pkt. 10c.

**Choice Dwarf Mixed**—Height 1 to 3 feet. Pkt. 10c.

## LATHYRUS LATIFOLIUS

**Everlasting Pea**—A hardy perennial climber of great beauty with elegant sweet pea-like flowers in great profusion; height, 6 to 8 feet.

**Pink Beauty, White, Red, Fine Mixed.** Pkt. 10c. ea.

## LAVATERA

**Splendens Rosea**—An annual of easy culture growing 2 to 3 feet in height. The plants are bushy and bloom profusely through the summer and fall. The flowers resemble single Hollyhocks and make attractive bouquets when cut. Pkt. 10c.

## LINUM (Scarlet Flax)

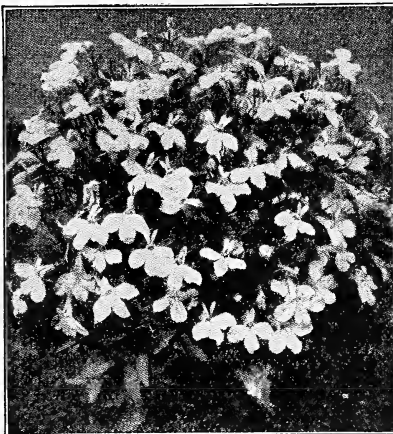
**Grandiflorum Rubrum**—A hardy annual of slender and graceful appearance with fine foliage and bright red flowers. It makes beautiful beds or borders and is largely used for cut flowers. Scarlet Flax makes a fine fall and winter flower, blooming profusely for several months. May also be sown in the spring. Height 1½ to 3 feet. Pkt. 10c.

## MATTHIOLA BICORNIS (Night Scented Stocks)

An old-fashioned annual whose purplish flowers are not particularly beautiful but the delightful fragrance emitted in the evening. Pkt. 15c.

## LINARIA MAROCCANA HYBRIDS

A pretty garden annual—sometimes called Baby Snapdragon because of its resemblance to snapdragons. They are easily grown and are exceptionally attractive as cut flowers. In this mixture are blue, rose, lavender, yellow, etc. Height 2 feet. Pkt. 10c



Lobelia Crystal Palace

## LOVE-IN-A-MIST

See Nigella.

## LUPIN

One of our most attractive and easiest grown native flowers. The plants grow 2 to 3 ft. high and have handsome spikes of flowers which are fine for cutting. If the plants are not allowed to go to seed they flower for several months in the spring.

**Hartwegi Dark Blue**—Pkt. 10c.

**Hartwegi Sky Blue**—Pkt. 10c.

**Hartwegi Mixed**—Pkt. 10c.

**Sulphureus Yellow**—A bright, clear yellow, growing about 3 feet high. Splendid for cutting. Pkt. 10c.

**Perennial Lupin**—A very beautiful hardy perennial. The foliage is a soft green and the stately spikes of flowers rise several feet above the foliage. They bloom continuously during the spring.

**Choice Mixed**—Pkt. 15c.

## LOBELIA

This hardy annual grows four to six inches high, is of compact growth, and literally covered with small bright flowers. By cutting back the plants during the summer and giving plenty of water they may be kept in flower all summer. Used for ribbon work and borders or hanging baskets.

**Bernard's Perpetual**—Flowers brilliant ultramarine blue, with a pure white mark at the base of each one of the two lower petals; height, 6 inches. Pkt. 10c.

**Crystal Palace**—Undoubtedly the finest dwarf blue Lobelia for bedding. Plants very compact, profusely covered with rich blue flowers. Height, 4 inches. Pkt. 10c.

**Hamburgia**—A trailing variety specially suited as a graceful plant for hanging baskets. Light blue. Pkt. 10c.

**Compact Light Blue (Emperor William)**—A dwarf light blue with light green foliage. Pkt. 10c.

**Royal Purple**—Deep rich, blue-purple flower, height 6 inches, very compact. Pkt. 10c.

## MANDEVILLA SUAVEOLENS

**Chili Jasmine**—An attractive climber with large white or bluish white fragrant flowers. The flowers often measure 2 inches across and bloom in racemes. Height 10 to 15 ft. Pkt. 10c.

## MATRICARIA (Fever Few)

**Double White (Capensis)**—A perennial bearing small double white flowers. Good for cutting. An old fashioned garden flower. Pkt. 10c.

**Golden Ball**—A compact dwarf plant, used for borders. The flowers are a double yellow and bloom freely. Pkt. 10c.

## MARVEL OF PERU

See Four O'Clock.

## MOONFLOWER

See Ipomoea.

## ICE PLANT (Mesembryanthemum)

**Crystallinum**—The variety is largely grown for the glistening foliage. The leaves are large, fleshy and covered with glistening dots. The flowers are small and white. This is not the trailing variety used on banks. Pkt. 10c.

## MIGNONETTE

Hardy annual, growing 6 to 12 inches high and bearing pyramid-shaped spikes, exceedingly fragrant.

The seeds may be sown from early spring until fall for a succession of bloom. It is used for bedding, borders, and cut flowers.

**A & M Colossal**—A new giant Mignonette. The spikes are two to three inches in diameter and each plant has many spikes. The flowers are a deep cream and fragrant. A novelty worth having. Pkt. 15c.

**Goliath Red**—Robust growing variety with enormous spikes of red colored flowers; height, 15 inches. Pkt. 10c.

**Machet Mixed**—A dwarf compact variety, with large stubby spikes covered with copper-red flowers. Pkt. 10c.

**Odorata Mixed**—Sweet scented. Pkt. 10c. oz. 25c.

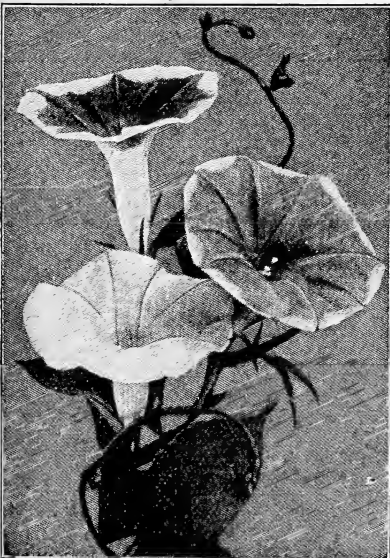
## A & M MORNING GLORY (Convolvulus)

Free flowering, beautiful climbers with rich and varied colored flowers; very useful for covering lattice work, verandas, etc., where they are exceedingly effective. Soak the seed for several hours in warm water before planting.

**Major Tall Mixed**—Attains a height of 15 feet or more, and comes in shades of Rose, Crimson, Blue and White. Pkt. 10c. oz. 20c.

**Minor Dwarf Mixed**—A beautiful hardy bedding and border plant, attaining a height of about 1 foot. Pkt. 10c. oz. 25c.

**Imperial Japanese Morning Glory**—The best Morning Glory for strong growth and varying colors. Height 15 to 20 feet. Pkt. 10c. oz. 25c.



Japanese Morning Glory

# A & M MARIGOLD

A & M strains of Marigold are becoming increasingly popular, and below we offer varieties which are most in demand.

Marigold is a hardy annual, in dwarf and tall varieties, growing from 6 in. to 3 feet high. The flowers are various shades of yellow and brown. The tall varieties are very valuable for large bedding or background work, and the dwarf varieties for borders.

## African

**African Tall Double Orange**—Beautifully formed flowers of gigantic size and bright color; height, 2½ feet. Pkt. 10c.

**African Tall Double Lemon**—Like the above but a pure citrus yellow. Pkt. 10c.

**African Tall Double Mixed**—Pkt. 10c.

**African Dwarf Double Mixed**—Pkt. 10c.

## French

The flowers are much smaller than the African, but are greatly prized for bedding.

**Tall French Mixed**—In shades of yellow, brown and tricolors. Height, 2 ft. Pkt. 10c.

**Dwarf French Mixed**—Like the above but only 10 inches high. Pkt. 10c.

**Dwarf French Legion of Honor**—The flowers are single and a dark, velvety brown, gracefully surrounded by a distinct gold ring. The compact, bushy plant flowers abundantly and is more lasting than any other annual. Pkt. 10c.

**Dwarf French Golden Ball**—A double golden yellow of very compact growth. Very fine for ribbon borders and beds. Blooms profusely. Height 1 ft. Pkt. 10c.

## MIMULUS

**Lewisii**—A beautiful pink mimulus. Is a native of California which adapts itself readily to cultivation. The plants form strong clumps which flower freely every spring. The seed is exceptionally fine but germinates easily if planted in seed boxes. May be planted either in fall or spring. Grows about 3 feet high and may be used for perennial borders or specimen plants, preferring a moist and partially shaded situation. Makes a good cut flower. Pkt. 10c.

**Tigrinus Queen's Prize Mixed**—Commonly called Monkey Flower. A dwarf, bushy growing annual blooming freely throughout the summer. The large Gloxinia-like flowers range in color from yellow to crimson, many being attractively spotted and blotched. Does best in a moist, shady situation. Height 1 foot. Pkt. 10c.

## MINA LOBATA

A showy hardy annual climber, bearing flowers of a brilliant red, changing to a pale yellow. Makes a luxuriant growth of 15 to 20 feet and flowers freely all summer. Adapted for porches, arbors, etc. Pkt. 10c.

## MOURNING BRIDE

See Scabiosa.

## MYOSOTIS

See Forget-Me-Not.

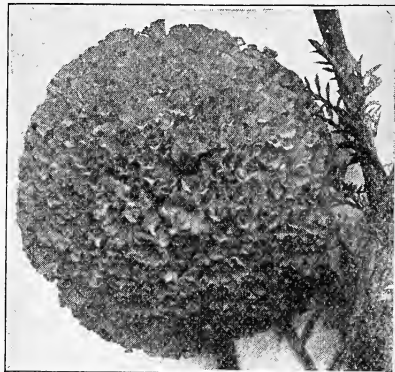
## NIGELLA

(Love-in-a-Mist)

A hardy annual, one foot high, with finely cut foliage. Oddly shaped blossoms in blue and white, and curious seed pods. Of easy culture.

**Miss Jekyll**—Long stemmed flowers which are of a clear corn-flower blue; elegant foliage; height, 18 inches. Pkt. 10c.

**Mixed Colors**—Blue and White. Pkt. 10c.



A & M African Tall Marigold

## NEMESIA

Hardy annual. This flower is obtainable in numerous shades of beautiful colors, and when grown in mass form, gives a fine effect. Sow in a seed bed early in the spring and transplant.

**Strumosa Suttoni**—Mixed colors, height 15 inches. Pkt. 25c.

**Nana Compacta, Triumph Mixed**—A brilliant mixture of colors making a fine low border or bed. Height 6 in. Pkt. 25c.

## NEMOPHILA

A hardy California annual growing about six inches high. The blossoms are cup-shaped and the colors are blue, white, lavender and spotted. The seed may be sown from October to March and is very valuable for carpet bedding.

**Insignis (Baby Blue Eyes)**—Sky blue, with white eyes. Pkt. 10c.

**Choice Mixture**—Pkt. 10c.

## NICOTIANA, OR FLOWERING TOBACCO

A hardy annual growing 3 to 4 feet high and of branching habit. The plants are covered with the slender tubular flowers all summer. They may be used as a background or as single specimens.

**Affinis**—White, and very fragrant. Pkt. 10c.

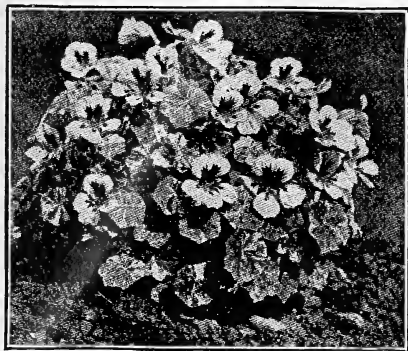
**Sanderac Mixed**—A new, large, flowering type, with various bright-colored blossoms. Pkt. 10c.

## ORNAMENTAL GRASS

This mixture of grasses is grown for their grace and beauty in the garden and for their cutting value. They are very decorative used either alone in vases or mixed with other flowers. Plant in the spring in the open ground. Pkt. 10c.

## OENOTHERA

**Evening Scented Primrose**—A tall growing plant bearing an abundance of large yellow flowers which expand in the evening. Height 2 to 3 feet. May be planted in part shade. Pkt. 10c.



A &amp; M Nasturtium Dwarf

**NASTURTIIUM COLLECTION**

One each of your selection. 3 packets  
25c, 6 packets 45c, postpaid.

**A & M NASTURTIIUMS**

These favorite and well known flowers are popular because of the great variety of colors which may be obtained with very little labor. They are not particular as to soil, fertility or cultivation and may be seen at the beach resorts growing in banks of pure sand where they get little or no attention. If you have an unsightly spot, plant A & M Nasturtiums and convert it into a beauty spot. The Dwarf varieties may be used for bedding and borders while the tall climbing varieties may be used for covering unsightly fences and fence corners. The nasturtium is known to most every one but few people appreciate its real value for the uses we have described. They will bloom in a few weeks after planting and will continue until cut down by the frost. A & M Nasturtiums are blended in pleasing mixtures and carry a great variety of color.

**Dwarf**

Aurora—Terra Cotta.  
Empress of India—Dark scarlet, dark leaved.  
Golden King—Indian yellow, dark leaved.  
Ruby King—Bluish rose.  
Ivy Leaved Dwarf Mixed.  
A & M Dwarf Mixed.  
Pkt. 10c each, oz. 20c.

**Tall**

Jupiter—Golden yellow.  
Regelanium—Purplish crimson.  
Twilight—Yellow marbled salmon rose.  
King Theodore—Bright crimson, dark leaved.  
Scarlet.  
Ivy Leaved Tall Mixed.  
A & M Tall Mixed.  
Pkt. 10c each, oz. 20c.

**A & M PETUNIAS**

A splendid race of plants, rich and varied colors, and profuse flowering with their charming and tender looking flowers, they are very beautiful for groups in the open. Sow seed early in spring, scatter thinly on an even surface and barely cover the seed with sand. If intended for the open ground, plant out into a frame to be kept until planting-out time. If for pots, pot singly into small pots in strong rich soil mixed with sand and shift as the plants grow larger.



Ruffled Giant Petunias

**Superb Double Fringed Mixed**

One of the finest strains of Petunias in existence. The double flowers are very large, full and symmetrically formed, having the edges of the petals beautifully fringed. Pkt. 50c.

**Giants of California**

A California introduction. An extremely fine type of this well known flower. A mixture which will be appreciated by all growers of Petunias. Pkt. 35c.

**Ruffled Giants**

A beautiful, deep throated new strain with flowers that are ruffled, fluted and fringed. Solid intense colors. Pkt. 25c.

**Grandiflora Single Mixed**

Exceedingly handsome and free flowering, containing the greatest variety of colors, yellow throated, veined and blotched. Very large flowers. Pkt. 15c.

**Hybrida Fine Mixed**

A good Petunia for massing in beds and borders, yielding a profusion of brilliantly marked flowers. Pkt. 10c.

**Howard's Star Improved**

Large velvety purple with a white star. Makes a very striking and attractive bed or border. Pkt. 15c.

**General Dodds**

A rich, blood red; this is a fine color. The flowers are large and erect and the plants large and free blooming. Pkt. 10c.

**Lord Courtenay**

A fine brilliant rose color with yellow throat. One of the finest varieties we offer. The flowers are large and showy and produced abundantly on large sturdy plants. Pkt. 15c.

**Nana Erecta Snowball**

The plants are erect and compact and are especially adapted for borders. The flowers are large and in constant bloom. Pkt. 15c.

**Nana Erecta Rosy Morn**

Of the same compact growth as Nana Erecta Snowball, but of lovely pink color with contrasting white throat. An improved strain. Pkt. 20c.

**Nana Erecta Violacea**

A new strain. This is a fine deep violet, the texture of the flower is like velvet and the plant growth erect and compact, like all of this class. Pkt. 20c.

**PETUNIA COLLECTION****No. 1—75c**

One each of Lord Courtenay, Giants of California, and Superb Double Fringed Mixed.

**PETUNIA COLLECTION****No. 2—40c**

Bed and Border Combination. One each of Nana Erecta Snowball, Nana Erecta Rosy Morn and Nana Erecta Violacea.

# A & M PANSIES

Pansies thrive best in a moist, sunny location and in rich, loamy soil. Seed should be sown in the autumn for early spring blossoms, or can be sown early in the year for good flowers later in the spring. The plants must be transplanted twice in order to get the largest flowers; once from the seed box to a chosen bed, and again to the open garden. This is important for large size pansies; use manure liberally. The blossoms are usually larger in the spring and again in the fall, and while they bloom freely all summer, the blossoms are small during the hot months.

## MASTODON PANSIES

These magnificent giant pansies are without a doubt, the most wonderful pansies of the day, with a robust vigor unknown in any other strain. These blossoms are almost four inches across and are of a most wonderful variety of colors and variegations. They bloom from two to four weeks earlier than any other variety of pansies. It is impossible to paint a word picture that will do justice to these flowers. You will never regret it, if you have them in your garden or porch box.

**Adonis.**—Lovely Sky-blue. Pkt. 25c.

**Bronze Mastodon.**—Very large, with all the different shades from burnished brass to gold, with no two flowers exactly alike. Pkt. 25c.

**Madame Steele.**—Elks Purple, of fine form and enormous size. Pkt. 25c.  
**Panama Pacific.**—A huge deep yellow; some have the dark center, some without. A beautiful bedding color. Pkt. 25c.

**White Mastodon.**—Snow white with a large center, very large and beautiful. Pkt. 25c.

**Mastodon Mixed.**—A wonderful collection of rich velvety shades, in great variety, with fine long stems. Pkt. 25c.

## A & M GIANT STRAINS

We offer Pansies in the following separate colors. They have been selected with care in order to give a complete range of colors from which to choose. Wonderful color effects and an abundance of plants can be had from planting a few packets from the following:

**Special offer**—Your choice of ten regular 15c packets, \$1.00.

**Giant Aurora**—Probably the best pure white of the Giant strain. Pkt. 15c.

**Giant Azure Blue**—Gigantic blooms of a delicate pale shade, freely produced on compact plants. Pkt. 15c.

**Giant Bridesmaid**—Shades of white shining rose, blotched. Pkt. 15c.

**Giant Eros**—This grand novelty produces very large flowers of a deep velvety brown color, with a broad golden yellow margin. The back of each bloom has the same broad margin as the front side, while the dark velvety center is shining through. Pkt. 15c.

**Giant Golden Queen**—A very pleasing shade of golden colored flowers, carried on good length stems. Pkt. 15c.

**Giant Madam Perret**—A variety of unusually compact habit. The lower petals are pale with rich rose color markings. Pkt. 15c.

**Giant Psyche**—Not many of the pansy varieties have such a winning appearance as Psyche. The characteristic five velvety, violet blotches are surrounded by a broad white edge. It is an ideal exhibition or market pansy. Pkt. 15c.

**Giant Prince Henry**—Darkest blue, very large beautiful flower. Pkt. 15c.

**Giant Ruby Red**—Very large blooms in striking red shades. Pkt. 15c.

**Giant White (Purple Eye)**—Large well formed flowers with black center. Pkt. 15c.

**Giant Yellow (Black Eye)**—Large handsome flowers of a rich yellow with black eye. Pkt. 15c.

## CHICAGO PARK BEDDING VARIETIES

**Cardinal**—Rich shade of red. Pkt. 10c.

**Golden Gem**—Large pure yellow. Pkt. 10c.

**Faust (King of Blacks)**—Large, well formed, glossy black flowers. The plants are compact and bloom for a long time. Pkt. 10c.

**Peacock**—Handsome flowers of a rich purple. Pkt. 10c.

**White (Black Eye)**—Large, well formed flowers with black center. Pkt. 10c.

## A & M GIANT PANSY MIXTURES

**Masterpiece ('Ruffled Pansy')**—A splendid new class. The petals have the appearance of fluted velvet. The colors are rich and varied, and the plants hardy and vigorous growers. Pkt. 25c.

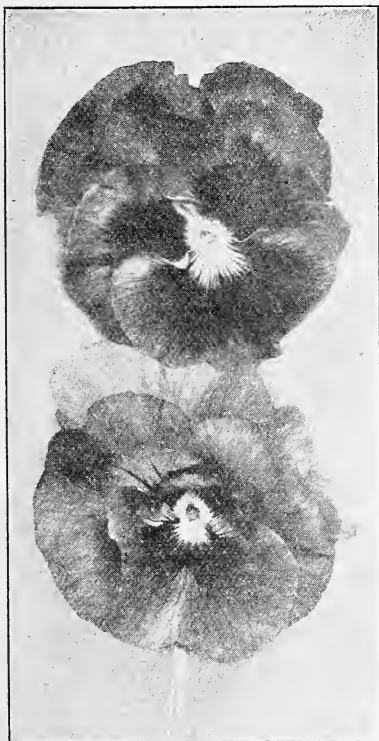
**New Giant Orchid Flowering**—A beautiful strain in rare shades. A quick bloomer and very fine. Pkt. 15c.

**Giant Trimardeau or French Mixed**—A very showy class of vigorous compact growth, flowers of an enormous size; finest strain. Pkt. 15c.

**Fine Mixed**—A splendid mixture for bedding. Pkt. 10c.

## TUFTED PANSY

See Viola Cornuta.



## A & M POPPIES

The different varieties of poppies are always favorites for outdoor display and the cultivation of them being so extremely simple entitles them to a place in every garden. Seed should be sown where the plants are intended to flower, because it is difficult to transplant them with any measure of success.



Poppy Shirley

### Double Annual

**Eldorado Double Shirley**—A new and lovely variety of Shirley poppies in a variety of wonderful colors. Each flower has many full petals giving the double appearance. A bed of these poppies would be a delight to any lover of flowers. Pkt. 10c.

**Ranunculus Flowered**—This variety of double Shirley was so named because of its resemblance to Ranunculus. It is a lovely flower and keeps well in water if cut before buds are fully opened. Pkt. 10c.

**Carnation Flowered Double Mixed**—Choice assortment of brilliant colors. Flowers very double and well fringed. The plants grow to a height of four feet and bear immense carnation-like blooms 6 to 8 inches across. Annual. Pkt. 10c.

**Peony Flowered Double Mixed**—Annual. Immense double globular flowers. Splendid for bedding and massing. Choice mixture. Pkt. 10c.

### PASSION FLOWER

A hardy perennial climber, very satisfactory for immense growth, as it will cover a porch or small cottage in one season.

**Coerulea Grandiflora**—Sky-blue. Pkt. 10c.

**Scarlet (Tacsonia)**—A beautiful red. Pkt. 10c.

**Edulis (Passiflora)**—A rampant grower, blossoming freely. The pulp of the fruit is delicious. Pkt. 10c.

### PENTSTEMON

**Gloxinioides "Sensation"**—The large Gloxinia shaped blossoms vary from pure white, pink, rose and crimson to mauve and purple, including many which are beautifully edged. Hardy perennials. Height, 2 feet. Pkt. 15c.

**Hybrids Mixed**—A free flowering mixture containing many colors. Pkt. 10c.

### PLATYCODON

#### (Japanese Bellflower)

A handsome perennial belonging to the Campanula family. The flowers are bell-shaped and borne freely throughout late spring and summer. They should be planted in well drained loamy soil and allow the flower stalks to die down naturally so that the crown will not be injured. A clear blue and pure white in mixture. Pkt. 10c.

### Single Annual Shirley

The most charming poppy in cultivation. The blossoms are bright and showy and include an almost endless variety of colors, from pure white, pink, terra cotta, salmon, chamols and rosy carmine, to brilliant crimson, many of the flowers being beautifully flaked or edged with white.

**American Legion**—A grand new poppy. The color is brilliant orange scarlet with yellow anthers. The flowers are three times the size of the ordinary Shirley Poppy. They grow about 2 to 3 feet high and should be planted where they are to flower. They give the best effect when grown in masses or beds. Pkt. 15c.

**Blue Shades**—Grey blue. Pkt. 10c.

**Apricot**—Deep apricot shades. Pkt. 10c.

**Rose Pink**—A fine large flower. Pkt. 10c.

**Picotee**—White cup, scarlet edged. Pkt. 10c.

**A & M Shirley**—Fine mixed. Pkt. 10c.

**Flanders Poppy**—The famous poppy of Flanders Field. A single annual of blood red color. Abundant in the fields of Europe. Pkt. 10c.

**Glaucum (Tulip Flowered)**—Beautiful variety, producing flowers of the most vivid scarlet, effective for beds or masses. Annual. Pkt. 10c.

### Double Flowered Poppies

(In Separate Colors)

These flowers are large and double. A very beautiful bed or border may be had by growing any of these separate colors.

**Double Rose**—Bright rose pink. Pkt. 10c.

**Double Vermillion Red**—Pkt. 10c.

**Double Shrimp Pink**—Pkt. 10c.

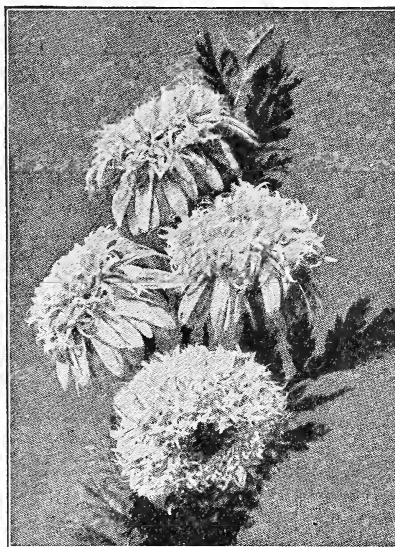
### Perennial Poppies

**Oriental Hybrids Mixed**—These tall stately Poppies have immense flowers in the most gorgeous colors. Height 2½ ft. Our seed has been saved from the choicest new hybrids. Pkt. 10c.

**Nudicaule, Iceland Poppy**—A beautiful class of perennial poppies. Sow in March and they will flower the same year. The beautiful large blossoms are borne on wire-like stems above the fern-like foliage, with a great variety of colors. The Iceland Poppy has more lasting qualities, as a cut flower, than any other poppy.

**Single Mixed**—Pkt. 10c.

**Double Mixed**—Pkt. 25c.



Pyrethrum



Phlox

### PHLOX DRUMMONDII

One of the most beautiful and easiest grown of our hardy garden annuals. The flowers are produced in large trusses and may be had in many lovely colors. The seed may be sown in boxes and transplanted when danger of frost is over or may later be sown in the open. They make a very effective show when grown in masses or borders.

**Large Flowering Grandiflora**—A fine type having large heads of bloom and growing 15 inches in height. This variety may be used for cutting.

**Scarlet, Yellow, Light Rose** dark center  
**Lilac** with white center    **Rosy Chamols**  
**White.**

**Mixed.** Pkt. 10c each.

**Large Flowering Dwarf**—This type has the large individual blooms of the Grandiflora but the growth of the plant is compact and dwarf attaining a height of 8 inches. Effective for parkings and low borders. **Mixed.** Pkt. 10c.

**Star Phlox**—A dwarf variety bearing star shaped blossoms in great abundance. Pkt. 10c

### PORTULACA

#### (Moss Rose)

Beautiful race of dwarf plants for rock work or dry sunny locations, bearing glossy cup-shaped blossoms in brilliant colors. Annual.

**Double Mixed**—Saved from the finest flowers only, and will produce a large percentage of doubles. Pkt. 15c.

**Single Mixed**—Large flowers. Pkt. 10c.

### PYRETHRUM

Hardy perennials which are easily grown and make handsome plants.

**Hybridum Roseum**—This variety is a tall vigorous grower and flowers freely. The flowers are daisy-like and the colors vary from rose, pink and cream to white; all have yellow centers. They make very desirable cut flowers, keeping well in water.

**Single Mixed**—Pkt. 10c.

**Double Mixed**—Produces a fair percentage of doubles. Pkt. 25c.

**Golden Feather**—Fine compact habit of growth, with bright yellow foliage, largely used for edgings and ribbon borders. Height, 9 inches. Pkt. 10c.

**Cinerariaefolium**—Bright green foliage, sturdy upright growth; used for borders and bedding. This is the variety used for making Buhach, the popular insect powder. Pkt. 10c.

### PHACELIA CAMPANULARIA

An attractive and easily grown native annual. The flowers are bell shaped and a deep rich blue in color. It blossoms freely during the early spring. May be used for beds or borders. Height one foot. Pkt. 15c.

## SALPIGLOSSIS

Highly ornamental half-hardy annual with large veined, funnel-shaped flowers; much prized for cutting; very showy in beds or border. A bed of these beautiful plants is one of the most striking features of the garden during June, July and August. Salpiglossis may be had in separate colors as well as mixed and very wonderful effects are possible with either one color or a combination of two or three of these separate varieties.

**Velvety Red**—Pkt. 10c.  
**Light Blue and Gold**—Pkt. 10c.  
**Primrose**—Pkt. 10c.  
**Rose and Gold**—Pkt. 10c.  
**Scarlet and Gold**—Pkt. 10c.  
**Violet and Gold**—Pkt. 10c.  
**Superbissima Mixed**—Pkt. 10c.



Salpiglossis

## PRIMULA (Primrose)

Primroses are charming plants which blossom freely during the spring and winter. They are of easy culture and should be sown from March to May and again in July to August for a succession of bloom. All make splendid pot plants and some blossom freely out of doors even during the winter.

**Giant Flowered**—The beautiful Fringed Chinese and Obconica Grandiflora are large flowered, bloom freely for several months and are one of the very best house plants. We offer only the best seed.

**Chinese Fringed Mixed**—Pkt. 35c.  
**Obconica Grandiflora**—Pkt. 35c.

**Malacoides**—A free flowering improved variety of Baby Primrose. They may be planted out of doors or used as pot plants. If planted in August in partial shade they will flower freely during the winter. Flowers a delicate lilac. Pkt. 25c.

## STATICE

**Sinuata**—An everlasting flower which is increasing in popularity. The plants throw large sprays of flowers which may be dried and make fine winter bouquets. It may be planted both in the spring and late summer. The seed should be kept quite moist until germinated.

**Bright Yellow**      **Blue**      **New Rose**  
**White**      **Mixed**      **Pkt. 10c each.**

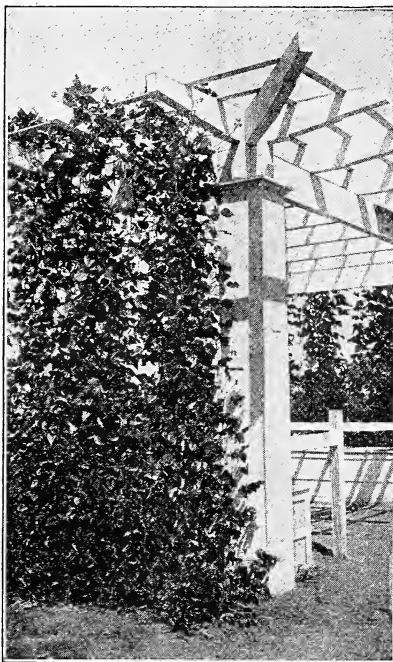
**Caspla**—A new variety having lovely blue minute flowers borne in long sprays, which is much used to mix with other flowers because of its dainty graceful effect. Is a hardy perennial flowering during the summer and early fall. May be dried as an everlasting flower and becomes white when dried. Seed may be planted in the spring or fall. Pkt. 10c.

**Latifolia**—This variety produces large branching sprays of minute lavender-blue flowers that are invaluable for cutting. May also be dried and used with everlasting flowers. A perennial. Pkt. 10c.

**Suworowii**—Spikes of pink flowers make this variety attractive for pot culture as well as garden growing. Pkt. 10c.

**Perezii**—A hardy perennial. The leaves are large and glossy and the flower stalk grows to a height of 2 feet or more above the leaves and is crowned with a mass of small violet blue flowers. This variety is popularly grown among shrubbery and as specimen plants. Pkt. 10c.

**Coccinea**—This annual variety grows in large sprays of small red flowers. Is attractive both for cutting and as a garden plant. The seed may be sown in the spring or in the fall. Height 2 ft. Pkt. 10c.



Scarlet Runner

## SCHIZANTHUS

Very beautiful and interesting annuals. This is one of the easiest annuals to raise from seed. Sow in open where plants are to flower. Exceptionally beautiful when in full bloom and literally covered with small orchid-like flowers.

**Grandiflora Mixed**—Pkt. 10c.  
**Rose and Amber Shades**—Pkt. 15c.  
**Wisetonensis Excelsior**—Exceptionally large flowered mixture. Pkt. 25c.  
**Retusus**—Another type of Schizanthus which has a branching habit, grows 18 inches high and makes a very fine cut flower.  
**Rose Yellow Blotch**—Pkt. 10c.  
**Lavender Yellow Blotch**—Pkt. 10c.  
**Pink**—Pkt. 10c.  
**Mixed**—Pkt. 10c.



Giant French Ranunculus

## RANUNCULUS

**Giant French Mixed**—This very popular flower may be grown readily from seed though home gardeners have usually grown them from bulbs. The seed should be sown in good sandy loam, covered lightly with sand and kept moist. May be planted from early fall to late spring and will flower the first season from seed. Our mixture is a very fine semi-double strain and contains a splendid range of colors. Pkt. 25c.

## RICINUS (Castor Oil Plant)

Effective for semi-tropical garden. Easily raised from seed, and should be grown in deep rich soil.

**Sanguineus**—Blood red stalks and red fruit. Height 8 feet. Pkt. 10c, oz. 25c.

**Zanzibariensis**—The giant type of the Castor Bean. Foliage varies in shades of color during the different stages of growth. Being a strong grower very suitable as a windbreak. Pkt. 10c, oz. 25c.

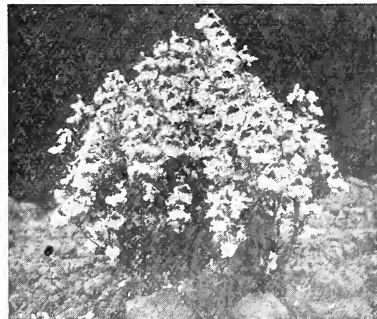
**Mixed Varieties**—Pkt. 10c, or 25c oz.

## ROMNEYA COULTERII (California Tree Poppy)

Also well known as the Matilija Poppy; perennial. It is of value as a cut flower, lasting well in the water, and its delicate primrose like perfume is most acceptable. They never lose the crumpled folds that in the case of most poppies betoken newly opened state. Flowers are four to five inches across, pure white, with a fine bunch of yellow stamens, resembling white, single Paeonies. Pkt. 10c.

## SCARLET RUNNER

A variety of climbing bean having rich scarlet blooms and most useful for decorative purposes in covering arbors and unsightly structures. The pods are also appreciated as an addition to the vegetable list. Pkt. 10c.



Schizanthus

# A & M Improved Strains of Double Flowering Stocks

The Stock is one of the many popular plants used for bedding. For brilliancy and diversity of color, fragrance and duration of bloom it is unsurpassed. Sow the seed in pans or boxes and transplant when large enough to an open, sunny location. Be careful to save the weak and delicate plants as these usually throw the best doubles. It is also a good idea to plant rather thickly so that the single can be weeded out as they appear. Stocks are one of our best winter blooming plants. May be planted from August to March for a succession of winter and summer bloom.



Early Mammoth Branching Nice

## Large Flowering Ten Weeks

This dwarf variety is splendid for edging, carpet bedding, borders and cut flowers. The different shades make very pleasing color effects. Height 12 inches.

Light Blue	Canary Yellow	White
Dark Blue	Bright Pink	Blood Red
Lavender	Carmine Pink	Choice Mixed

Peach Blossom, light pink

Each Pkt. 10c.

## RHODANTHE

**Maculata Rosea**—One of the most attractive everlasting flowers. The flowers hang like little bells on the stems and make a pleasing and dainty cut flower either fresh or dried. Pkt. 10c.

## RUDBECKIA

**Bicolor Superba**—These hardy annuals are of easy culture and produce an abundance of flowers. The flowers have a cone in the center surrounded by yellow and brown petals. These bright flowers are borne gracefully on long stems, and are especially recommended for cutting. Pkt. 10c.

## SHASTA DAISY

See Daisy.

## SILENE (Catchfly)

**Pendula Compacta**—Bright double rose colored flowers produced in great abundance on dwarf compact plants. Very excellent for borders, masses and recommended for carpet bedding on bulb beds. Pkt. 10c.

## A & M SCABIOSA

**Mourning Bride, Pin Cushion**—An annual which is an old garden favorite and which has been much improved recently.

The flowers are large and vary from a lovely light blue to deepest red. They are borne on long graceful stems and produced abundantly from spring until autumn. They are especially recommended for cutting. Sow seed in boxes and transplant or sow in open ground after frost is over, and thin to 15 inches apart. Height 3 to 4 feet.

**Azure Fairy**—Light Blue.

**Black Prince**—A deep red almost black.

**Flesh Color**—A soft flesh pink.

**Fiery Scarlet**—A brilliant color.

**Rose**—Soft Rose.

**Snowball**—Pure white.

**Yellow**—Light yellow.

**Mixed**—A mixture of all shades.

Pkt. 10c. each.

**Caucasica**—A highly decorative perennial variety. Flowers large and of a soft lavender or heliotrope shade. Especially valuable for cutting, lasting a long time in water. Pkt. 10c.

**Japanica**—A perennial variety from Japan bearing large lavender blue flowers in great profusion. Splendid for cutting. Height 3 ft. Pkt. 10c.

## Early Mammoth Branching Nice

This type is excellent for bedding and borders and is splendid for cutting. We offer fine varieties in separate colors and a choice mixture. Height 18 inches.

**Giant Carmine Rose (Abundance)**—Very large spikes. Pkt. 15c.

**Giant White and Carmine (Almond Blossom)**—Large, white flowers shaded with carmine. Pkt. 15c.

**Giant Old Rose (Belle of Naples)**—Pkt. 15c.

**Giant Chamois and Rose (Golden Sheaf)**—A new shade chamois shaded with rose. Pkt. 15c.

**Giant Pale Violet (Parma Violet)**—Pkt. 15c.

**Giant Silvery Lilac (Empress Augusta Victoria)**—One of the best. Pkt. 15c.

**Giant Canary Yellow (Monte Carlo)**—Pkt. 15c.

**Giant White (Mont Blanc)**—Pkt. 15c.

**Giant Flesh Pink (Beauty of Nice)**—Pkt. 15c.

**Giant Dark Blue (Summer Night)**—Pkt. 15c.

**Giant Rosy Lilac (Queen Alexandria)**—Pkt. 15c.

**Giant Bright Violet**—Rich violet, or purple. Pkt. 15c.

**Giant Crimson King**—Pkt. 15c.

**Giant Nice**—Finest Mixed. Pkt. 15c.

## Perpetual Branching

**Giant Perfection**—This type is of branching habit with long stems, making it very desirable for cutting. The percentage of double is high. Height 2 feet.

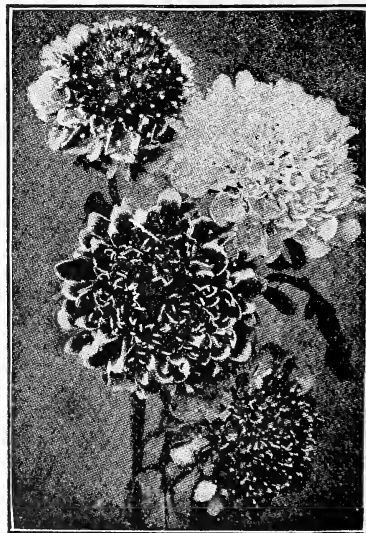
**Blood Red**—Pkt. 15c.

**Rose Pink**—Pkt. 15c.

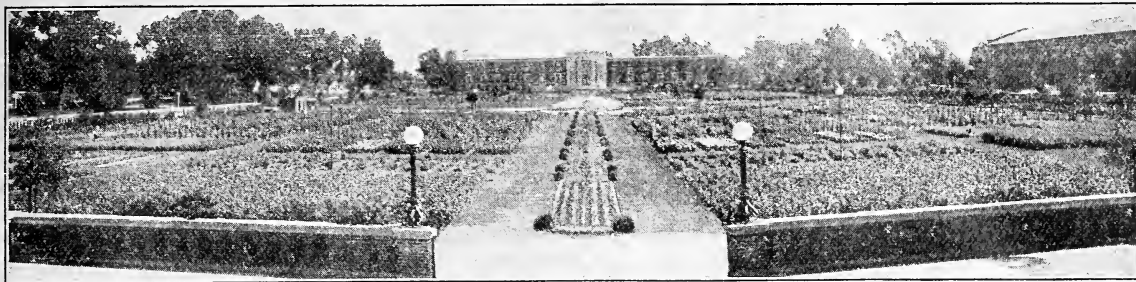
**Lilac**—Pkt. 15c.

**Deep Purple**—Pkt. 15c.

**Mixed**—Pkt. 15c.



Scabiosa



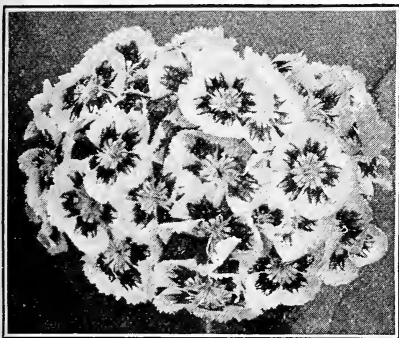
Sunken Gardens at the Exposition Grounds, Los Angeles, Cal.

## “Important Notice”

We take pleasure in calling your attention to the seven acre Sunken Garden at Exposition Park, a permanent free exhibit maintained jointly by the City and County of Los Angeles under the auspices of the California Nurserymen's Association. The object of this garden is to demonstrate the great variety of flowering and ornamental plants which can be successfully grown in the open ground at all seasons of the year. A frequent visit to these grounds will be well worth the time of anyone interested in their garden.

### SENSITIVE PLANT

An interesting plant, the leaves of which close when touched; elegant foliage; flowers pink. Pkt. 10c.



Sweet William

### SWEET WILLIAM (*Dianthus Barbatus*)

A hardy perennial blooming the second year from seed. Grows one to two feet high and bears its flowers in clusters at the end of a stiff stem. The individual flowerets are handsomely colored and marked. It makes a beautiful bedding plant, and is of easy culture.

Single Mixed—Very attractive. Pkt. 10c.

Double Mixed—Pkt. 10c.

Annual Single Mixed—A fine mixture blooming the first year from seed. Pkt. 10c.

### SMILAX

A perennial vine which thrives best in a shady location. Very useful for decorative purposes. Pkt. 10c.

### SNAPDRAGON

See *Antirrhinum*.

### SALVIA (Scarlet Sage)

A tender perennial blooming the first year from seed. They make gorgeous plants, the brilliant red blossoms are borne on long stems in racemes or spikes and are displayed with striking effect against the deep green foliage.

Splendens—Height 3 feet. Pkt. 10c.

Bonfire—Compact bush 2 feet in height. Pkt. 10c.

Fireball—Height 3 feet. Pkt. 10c.

### SALVIA FARINACEA

A hardy perennial. The spikes of bright light blue flowers rise above the foliage in an almost continuous mass of bloom. The flowers are excellent for cutting and the plants may be used for beds, borders, or as specimen plants among shrubs. Pkt. 15c.

### SUNFLOWER (*Helianthus*)

Stately, hardy, annuals of easy culture. Useful for background or as a fence and often grown for the seed. Height, 6 to 8 feet.

California Double—Large, massive, bright yellow flowers, height 6 feet. Pkt. 10c.

New Red Sunflower—Is a very apt description of this new variety. The plant is of a freely-branching habit, with well-shaped dark-centered flowers of bright chestnut red, merging to a yellow at the tips of the petals. Height 6 feet. Pkt. 10c.

Mammoth Russian—Is planted largely for seed. It also makes a good windbreak and a very ornamental background. Requires little attention. Pkt. 10c, lb. 25c.

Miniature Mixed—This is a splendid cutting variety of many different colors which blend together beautifully. Pkt. 10c.

Autumn Glory—A recently introduced perennial belonging to the sunflower family. The flowers are about 2 inches in diameter with bright yellow petals and a dark center. The plant grows about six feet tall and branches like a giant cosmos. During September and October each plant is a gorgeous mass of bloom. When the plant has finished blooming cut away the old stalks and in the winter the new growth will start from the old roots again. The seed may be planted in the fall or spring. Pkt. 10c.

### STEVIA

Serrata—Small fragrant white flowers borne in large heads which are valuable for cutting. A free blooming perennial of easy culture. Pkt. 10c.

### THALICTRUM

Dipterocarpum—A recent introduction from China. The foliage somewhat resembles that of the Columbine and the large feathery heads of rose colored flowers are borne on long stems above the foliage. They bloom through the summer and attain a height of about 4 feet. An excellent perennial. Pkt. 25c.

### THUMBERGIA

#### (Black Eyed Susan)

A free blooming annual climber with attractive green foliage. It is also used extensively in hanging baskets, window boxes, etc. The flowers are small in varied colors of yellow, orange and white with black eyes. Finest mixed. Pkt. 10c.



New Red Sunflower

# A & M California Grown Sweet Peas

## STANDARD GIANT SPENCERS

### For Spring and Summer Blooming

California now leads the world in the production of high grade sweet pea seed. Hundreds of acres may be seen in solid fields in the sweet pea producing sections of the Golden State, and it is a most beautiful sight to behold. The Giant Spencers listed below are particularly recommended for spring and summer blooming and will thrive in any climate where other sweet peas will grow.

This strain of Sweet Peas bears three and four very large flowers on long stiff stems. Many of the flowers are ruffled and wavy and the great assortment of shades makes them a remarkable strain for all purposes.

#### BLUE

Mrs. Tom Jones—Best bright blue. Pkt. 15c, oz. 40c.

#### BLUE (Dark)

Blue Monarch—Dark blue. Pkt. 15c, oz. 40c.

Jack Cornwall V C—Very deep blue. Pkt. 15c, oz. 40c.

#### LAVENDER

Asta Ohn—Lavender suffused mauve. Pkt. 15c, oz. 40c.

Lavender Geo. Herbert—Clear lavender. Pkt. 15c, oz. 40c.

Hawlmarm Lavender—Pale clear lavender. Pkt. 15c, oz. 40c.

#### PURPLE

Royal Purple—Pkt. 15c, oz. 40c.

#### CREAM PINK

Mrs. Hugh Dickson—Cream pink and buff. Pkt. 15c, oz. 40c.

Mrs. Routzahn—Cream pink suffused apricot. Pkt. 15c, oz. 40c.

Miriam Beaver—Cream pink suffused salmon. Pkt. 15c, oz. 40c.

#### DEEP CREAM PINK

Picture—Deep La France pink on cream ground. Pkt. 15c, oz. 40c.

La France—Shrimp pink. Pkt. 15c, oz. 40c.

#### PINK (Pale)

Elfrida Pearson—Shell pink. Pkt. 15c, oz. 40c.

Pink Pearl—Silver pink. Pkt. 15c, oz. 45c.

#### ROSE PINK

Countess—Pkt. 15c, oz. 40c.

Hercules—Pkt. 15c, oz. 40c.

#### ROSE

Hope—Soft rose. Pkt. 15c, oz. 40c.

Lovely—Rose and flesh pink. Pkt. 15c, oz. 40c.

Rosabelle—Large bright rose. Pkt. 15c, oz. 40c.

#### BICOLOR PINK

Appleblossom—Rose and pink. Pkt. 15c, oz. 40c.

Blanche Ferry—Red and White. Pkt. 15c, oz. 40c.

#### SALMON

Barbara—Salmon. Pkt. 15c, oz. 40c.

Sterling Stent—Salmon orange. Pkt. 15c, oz. 40c.

Hawlmarm Pink—Deep salmon pink. Pkt. 15c, oz. 50c.

#### ORANGE

Robert Sydenham—Orange. Pkt. 15c, oz. 40c.

#### ORANGE PINK

Helen Lewis—Pkt. 15c, oz. 40c.

#### ORANGE SCARLET

Defiance—New. Pkt. 50c, oz. \$3.00.

The President—Pkt. 15c, oz. 40c.

#### ROSE CERISE

Doris—Salmon cerise. Pkt. 15c, oz. 40c.

Illuminator—Salmon orange overlaid cerise. Pkt. 15c, oz. 40c.

#### SCARLET CERISE

Royal Scot—Orange scarlet cerise. Pkt. 15c, oz. 40c.

#### DEEP CERISE

Fiery Cross—Orange cerise. Pkt. 15c, oz. 40c.

#### CRIMSON

Crimson King—New rich deep crimson. Pkt. 25c, oz. \$1.50.

King Edward—Crimson. Pkt. 15c, oz. 40c.

Field Marshall—Blood crimson. Pkt. 15c, oz. 40c.

#### SCARLET

Queen Alexandra—Scarlet. Pkt. 15c, oz. 40c.

Scarlet Emperor—Rich scarlet. Pkt. 15c, oz. 40c.

#### CREAM

Clara Curtis—Primrose. Pkt. 15c, oz. 40c.

Dobbie's Cream—Deep primrose. Pkt. 15c, oz. 40c.

#### WHITE

King White—Pure white. Pkt. 15c, oz. 40c.

Constance Hinton—Black seeded white. Pkt. 15c, oz. 40c.

#### MAROON

King Mancel—Very deep maroon. Pkt. 15c, oz. 40c.

Warrior—Deep maroon. Pkt. 15c, oz. 40c.

Hawlmarm Maroon—Red maroon. Pkt. 15c, oz. 40c.

#### PICOTEE

Cherub—Deep cream, edged rose. Pkt. 15c, oz. 40c.

Dainty—White edged pink. Pkt. 15c, oz. 40c.

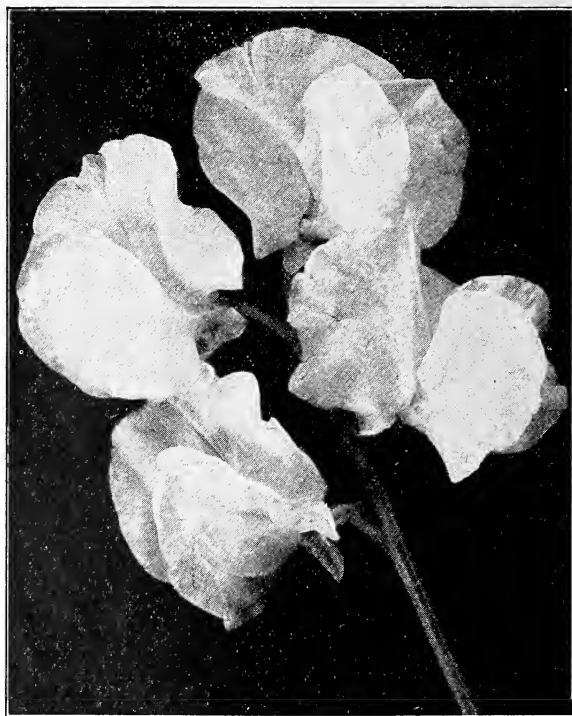
#### Marbled, Flaked and Striped

America—White with red. Pkt. 15c, oz. 40c.

Loyalty—White with violet. Pkt. 15c, oz. 40c.

Senator—White with maroon. Pkt. 15c, oz. 40c.

A & M GIANT SPENCER MIXED—Pkt. 10c, oz 30c, lb. \$3.00.



Giant Spencer Sweet Peas

## CUPID SWEET PEAS

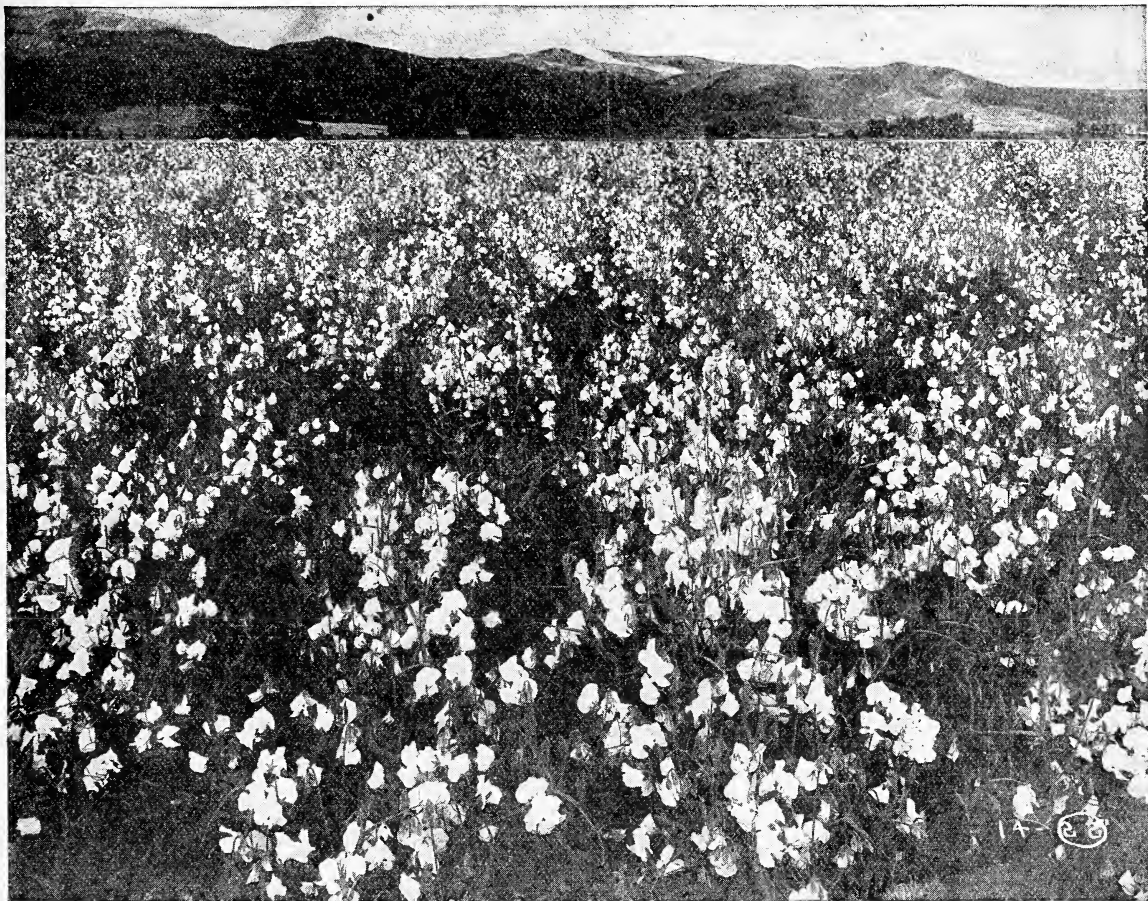
These Sweet Peas make the most brilliant and showy parkings, beds and low borders imaginable. They make a uniform growth about 8 inches high and each plant is about 1 foot in diameter. The colors are pink, white, red, blue, lavender, etc., and a color scheme may be worked out using the separate colors or the choice mixture may be used. They will bloom freely for several months. The culture is the same as for the climbing variety but for a solid mass plant the rows 15 inches apart.

Red	Pink	Lavender	Captain of the Blues	White
Othello (Maroon)	Mixed		Pink and White	

Pkt. 10c each, oz. 30c.

## "RAINBOW COLLECTION"

Of Spencer Sweet Peas, put up in seven separate packets. All colors of the rainbow, making a perfect blend. Red, Pink, Orange, Yellow, Lavender, Blue and Purple. The Collection 75c.



A Field of California Grown A &amp; M Sweet Peas

## A & M Early or Winter Flowering Spencer Sweet Peas

These are sometimes called Winter Flowering and also Christmas Flowering. The growers class them as early flowering because when planted at the same time as the lates (standards) they will flower at least a month earlier. Because of this early tendency, if planted in August or September they may be brought into bloom in the late Fall and early winter, and for this reason they have been called Christmas Sweet Peas. The planting season is from the first of August until the middle of January. The varieties selected have long stems with three and four blooms to a stem.

These Sweet Peas are used extensively by commercial growers throughout the East for growing under glass. Commercial growers in California grow them in the open without any shelter and have them in bloom throughout the winter.

### NEW VARIETIES

Eldorado—Orange salmon. 50c pkt.

Rose Dore—Soft rose suffused with salmon orange. 50c pkt.

Starlight—Clear lavender blue. 50c pkt.

### BLUE

Blue Bird—Violet blue. Pkt. 15c, oz. 90c.

Wedgewood—Bright blue. Pkt. 15c, oz. 75c.

True Blue—Mid blue. Pkt. 15c, oz. 90c.

### LAVENDER

Asta Ohn—Lavender, suffused mauve.

Harmony—Clear lavender. Pkt. 15c, oz. 90c.

### MAUVE

Mauve Beauty—Rosy Mauve. Pkt. 15c, oz. 75c.

### PURPLE

Amethyst—Royal Purple. Pkt. 15c, oz. 90c.

### PINK BICOLOR

Columbia—Salmon rose and white. Pkt. 15c, oz. 90c.

### PINK

Song Bird—Blush Pink. Pkt. 15c, oz. 75c.

Spring Maid—Cream Pink. Pkt. 15c, oz. 75c.

Bohemian Girl—Deep Pink. Pkt. 15c, oz. 75c.

Apricot Orchid—Buff Pink. Pkt. 15c, oz. 75c.

### ROSE PINK

Hercules—Rosy pink. Pkt. 15c, oz. 90c.

Rose Queen—Rose pink. Pkt. 15c, oz. 90c.

Yarrowa—Rose with lighter wings. Pkt. 15c, oz. 90c.

Zvolanek's Rose—New giant rose pink.

Pkt. 25c, oz. \$1.50.

### ROSE

The Beauty—Fiery rose. Pkt. 15c, oz. 90c.

Rose Charm—Bright rose. Pkt. 15c, oz. 90c.

### SALMON

Mrs. Kerr—New, Salmon. Pkt. 25c, oz. \$1.50.

Torch—Salmon orange. Pkt. 15c, oz. 90c.

Helen Lewis—Orange salmon. Pkt. 15c, oz. 60c.

### ORANGE SCARLET

Fire King—Pkt. 15c, oz. 75c.

### CERISE

Glitters—Cerise. Pkt. 15c, oz. 90c.

Illumination—Salmon cerise. Pkt. 15c, oz. 75c.

### SCARLET

Grenadier—New. Pkt. 25c, oz. \$1.50.

Aviator—Pkt. 15c, oz. 90c.

### MAROON

Othello—Deep maroon. Pkt. 15c, oz. 90c.

Congo—Maroon. Pkt. 15c, oz. 90c.

### CREAM

Cream—As named. Pkt. 15c, oz. 90c.

Canary Bird—Primrose. Pkt. 15c, oz. 90c.

### WHITE

All White—Pkt. 15c, oz. 90c.

White Orchid—Pkt. 15c, oz. 75c.

Snowstorm—Pkt. 15c, oz. 90c.

## A & M GIANT EARLY FLOWERING SPENCER MIXED

Pkt. 15c, ½ oz. 40c, oz. 75c.

## WINTER FLOWERING GRANDIFLORAS

These Sweet Peas, if sown in August or September, will be in flower by Christmas. They are fragrant but flowers are smaller than Spencers.

Christmas pink.

Christmas White.

Earliest of all—Pink and white.

Lavender Nora.

Mrs. Alexander Wallace—Lavender.

Mrs. F. J. Dolnasky—Clear pink.

Blue Jay—Violet blue.

Pkt. 10c, oz. 30c, lb. \$3.00.

Best Mixed—Pkt. 10c, oz. 30c, lb. \$3.00.

# A & M SELECTED ZINNIAS



New Dahlia Flowered Zinnia

## A & M ZINNIAS New Dahlia Flowered

See Page 60 for Special Collections of Dahlia Flowered Zinnias

These flowers are beautifully illustrated on the front cover of this catalog. The picture is a reproduction of an actual photograph and colored by an artist who saw the field. The plants are very sturdy and produce many flowers with stout stems. The flowers in full bloom often measure four inches in depth and six inches in diameter. The flowers differ from other Zinnias in the way the petals turn in toward the center which gives each flower a deep instead of flat appearance, also each separate petal is cupped upward.

The colors range from various shades of yellow and orange through pink, rose, crimson, to purple. As many as twenty colors and shades may be found in this Dahlia Flowered mixture.

Some wonderful new separate colors are offered this year.

**Exquisite**—One of the most pleasing shades. Color a light rose with deeper rose center. Pkt. 50c.

**Golden State**—Yellow in bud, turning to a rich orange when in full bloom. Pkt. 50c.

**Crimson Monarch**—Bright crimson. The largest of the dahlia-flowered type. Pkt. 50c.

**Oriole**—Immense flowers of orange and gold. Very fine. Pkt. 50c.

### Special Dahlia Flowered Mixture

This mixture contains all of the Zinnia novelties and is a most wonderful collection. It will make an excellent garden show and produce fine flowers for cutting. Pkt. 35c.

### Dahlia Flowered Mixed

While this mixture does not contain all of the novelties, its color range is very good and will please you. Pkt. 25c.

## A & M IMPROVED GIANT ZINNIAS

Marked improvements have been made in the Zinnia during the past few years, the old types having been almost entirely replaced with giant sorts in pleasing colors. Planted in the early spring they will bloom in six to eight weeks from planting and will continue throughout the summer and fall. A & M Improved Giant Strains of Zinnias are the result of years of selection. The blooms are of immense size often measuring six to eight inches across and the colors are bright and attractive. Do not confuse these Zinnias with the old time flower of ten years ago.

### GIANT DOUBLE STRAIN

This strain is offered in several colors. The individual blooms often measure 5 inches in diameter and the plants are in continuous flower from late spring until well into the fall. An annual which can be grown from seed with a minimum amount of trouble.

Flesh Shades	Orange	Rose Shades
Golden Yellow		Scarlet Shades
Pink Shades		Sulphur Yellow
Purple Shades		White
Apricot Buff		Lavender
Salmon Rose		Buttercup Yellow

Pkts. 15c. each, 1-8 oz. 40c.

Special Giant Mixed—Pkt. 15c, 1/8 oz. 40c.

All colors mixed—Pkt. 10c, 1-8 oz. 25c.

### VICTORY-QUILLED

The petals of this type are peculiarly quilled. Various shades of Rose and Lilac, which when the petals twist, reflect pleasing autumn colors. Pkt. 25c.

## ZINNIA

### Medium Flowered Type ELEGANS BEDDING ZINNIA

This variety is the most uniform in size of flower and plant. The flowers measure about 2 inches across, have long stems and for bouquets and vase work are both graceful and attractive. A very complete mixture of colors.

Tall Mixed—Height 3 feet.

Dwarf Mixed—Height 2 feet. Pkt. 10c each.

### CURLED AND CRESTED

The flowers of this variety are medium sized and the petals are curled, crested and twisted. A novelty worth growing. The mixture of colors is especially pleasing. Pkt. 10c.

## ZINNIAS

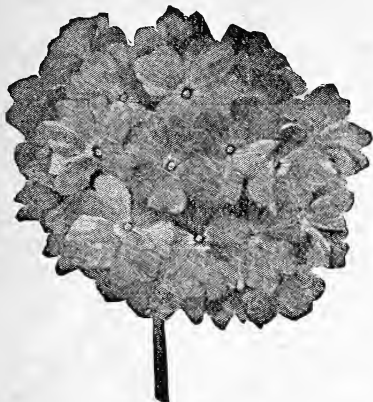
### Small Flowered Type HAAGAENA (Mexican Hybrids)

Of new introduction, dwarf, the plant carrying small prettily marked flowers. A variety when better known will have a big demand. Pkt. 25c.

### LILLIPUT DOUBLE MIXED

Small double flowers. Dwarf compact bushes and profuse bloomer. A good Zinnia for cutting. Pkt. 15c.

## A & M Mammoth Verbenas



Verbena Lucifer

### Auricula Eyed Mixed

Brilliant colors, each flowerlet having a large, white eye. A beautiful and striking mixture. Pkt. 10c.

A hardy perennial of trailing habit and one of the finest and best known for beds, parkings, etc. The colors are brilliant and varied and the new large flowered strains are handsome as cut flowers. The flowers are fragrant and produced freely throughout most of the year. They will stand much neglect after established, requiring but little water. Plant in seed boxes and transplant to a sunny situation, or may be sown in open ground during warm weather.

### Hybrida Giants

A new strain of verbenas with the same characteristics as the mammoth except that each flowerlet in the cluster is much larger. This gives the blooming plant a more brilliant effect.

Lucifer Scarlet—No eye. Pkt. 15c.

Rosea Stellata—Rose pink with white eye. Pkt. 15c.

Violacea Stellata—Deep purple with white eyes. Pkt. 15c.

Hybrida Giant Mixed—Pkt. 15c.

### Hybrida Mammoth

Blue—Pkt. 10c.

Defiance Scarlet—Pkt. 10c.

Pink—Pkt. 10c.

Purple—Pkt. 10c.

Yellow—Pkt. 10c.

White—Pkt. 10c.

Firefly—Scarlet with white eye. Pkt. 10c.

Mixed—Pkt. 10c.

## VALERIANA (Garden Heliotrope)

Rubra Mixed—A much prized showy hardy perennial. It bears dense clusters of small heliotrope scented flowers of red or white. Blooms continuously and is easily raised from seed. Pkt. 10c.

### VINCA

Rosea (Madagascar Periwinkle)—An attractive and ornamental plant. Very good for bedding and borders. It is free blooming and makes a fine cut flower, all the buds opening in water. It also makes a fine pot plant. Seed may be sown early in spring in seed boxes or in the open ground after danger of frost is over. Flowers are rose, pink and white. Pkt. 10c.

### VIOLET

Dark blue. Very sweet smelling and probably the most popular of the Violet odorato strain. Pkt. 10c.

### VIOLA CORNUTA

"Tufted Pansies"—The flowers are not so large as regular pansies but bloom so freely that for bedding effect they are unsurpassed. The colors are distinct and they also bloom for a long time.

Blue Perfection—Deep bright blue. Pkt. 15c.

Papilio—Light blue. Pkt. 15c.

Yellow—Pkt. 15c.

Mixed—Pkt. 10c.

### WALLFLOWER

Delightfully fragrant flowers growing in spikes similar to stocks.

Annual Single Mixed—A beautiful single variety which flowers during the summer from seed sown in the spring. Pkt. 10c.

Perennial Double Mixed—Handsome double flowers. Should be planted in the fall for spring blooming or early in spring for late summer flowers. A fine mixture of colors. Pkt. 15c.

### WILD CUCUMBER VINE

One of the most rapid and vigorous climbers we have. It is invaluable for covering unsightly places and fences. Pkt. 10c.

### WISTERIA

An extremely graceful climber. For trellis and arbor work no other vine can surpass it. Grows readily from seed but plants do not make rapid growth or bloom until well established. Blue or White. Pkt. 10c each.

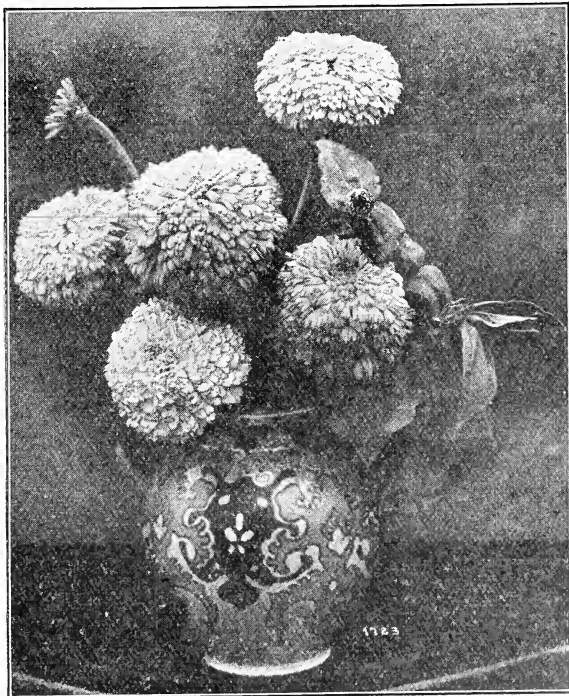
### XERANTHEMUM

Double Mixed—One of the most attractive and satisfactory everlasting flowers. The flowers are white, purple, yellow and rose and are pretty in the garden or dried. Plant in the open ground in a sunny situation after frost is over. Pkt. 10c.

### CALIFORNIA WILDFLOWER MIXTURE

A splendid mixture of true California annual wild flowers so blended as to give a succession of bloom from early spring to mid-summer. All colors may be found in this mixture. For best results the seed should be sown in a prepared seed bed. They may be planted from fall to early spring—a longer bloom resulting from the fall planting.

If you have a piece of ground you cannot irrigate, or have not time to give particular attention, yet you want to have something beautiful instead of unsightly weeds, we advise you to plant our California Wild Flower mixture. It contains twenty distinct species of wild flowers. One pound of seed is sufficient to plant an acre. Pkt. 10c, oz. 50c, 1/2 lb. \$2.50.



Giant Picotee Zinnia

### GIANT PICOTEE ZINNIA

This very attractive novelty has taken well among the flower fanciers. The bronze, yellow, pink and crimson shades are well marked with Gold Picotee on the edge of petals. Pkt. 25c.

Picotee Golden Pheasant—A new variety. A golden color with edges marked in an attractive shade of bronze; 2 to 3 feet high. Pkt. 25c.

# TREE AND SHRUB SEEDS

Most tree seeds should be planted during the winter and early spring months. Pine and Conifer seeds in March and April. Sow in boxes of well drained soil and keep in a protected place. A lath house is the best. Water in the morning to prevent seedlings from "damping off." When about two inches high, pot up and grow in pots until large enough to set out.

**ACACIA**—Soak seed in hot water 12 hours before planting.

**A. Baileyana**—30 ft. The most popular. A fast grower with glaucous green foliage. Pkt. 10c, oz. 45c.

**A. Cultiformis**—"Knife-leaved" Acacia. A fine shrub with glaucous green leaves. Height 15 ft. Pkt. 15c, oz. 50c.  
**A. Dealbata**—40 ft. "Silver Wattle" finely cut foliage. Good for street planting. Pkt. 10c, oz. 45c.

**A. Decurrens**—50 ft., "Green Wattle." A rapid grower. Can be used as windbreak and is valuable for turner's work. Is rich in tannin. Pkt. 10c, oz. 45c.

**A. Floribunda**—30 ft. A pretty tree of pendulous habit, quick growth and constantly in bloom. Pkt. 15c, oz. 50c.

**A. Latifolia**—30 ft. "Golden Wattle." Ornamental; leaves long and rather broad. Does well on the coast. Pkt. 10c, oz. 45c.

**A. Lopantha**—30 ft., "Crested Wattle." Rapid grower and useful for temporary shelter. Grows in poor soil. Pkt. 10c, oz. 15c.

**A. Melanoxylon**—75 ft. A compact tree useful for street planting. Wood used in cabinet work. Pkt. 10c, oz. 45c.

**ACER MACROPHILLUM**—"California Maple." 75 ft. A native deciduous tree. Leaves large. Beautiful in autumn. Pkt. 10c, oz. 25c.

**CALLISTEMON RIGIDUS** ("Bottle Brush")—A graceful tree or large shrub with drooping branchlets. The leaves are narrow, pointed and rigid. Flowers in bottle brush like spikes of deep red. Succeeds with little care. Pkt. 15c, 1/4 oz. 50c.

**CAMPHORA OFFICINALIS**—"Camphor Tree." 30 ft. An ornamental and attractive tree with shiny green foliage. Pkt. 10c, oz. 25c.

**CASSIA ARTEMISIOIDES**—Shrub. Soft, gray-green, finely-cut foliage. Deep yellow, sweet scented flowers. Stands drought. May be used for hedges. Pkt. 15c.

**CEDRUS DEODARA**—A beautiful evergreen of silvery green foliage, pyramidal form and drooping branches. Pkt. 15c, oz. 60c.

**CERATONIA SILIQUA**—"St. John's Bread" or "Carob Tree." A very ornamental compact growing tree. Thrives in any soil and will withstand drouth. The leaves are a dark, glossy green. Pkt. 10c, oz. 25c.

**COTONEASTER PANNOSA**—Shrub of upright growth, small branches drooping. Leaves green above, silvery beneath. White flowers followed by red berries in the fall. Pkt. 10c.

**CALIFORNIA CHERRY** (*Cerasus ilicifolia*)—A bush or small evergreen tree, very ornamental with shiny, green holly-like foliage. The flowers grow in racemes and are followed by large, red cherries. A handsome shrub and extensively used for hedges. A native of California. Pkt. 10c, oz. 15c, lb. \$1.50.

**CATALINA CHERRY** (*Cerasus integrifolia*)—A native of Catalina Islands. Similar to the preceding but the leaves are larger and less spiny and the fruit larger. Pkt. 10c, oz. 15c, lb. \$1.50.

**CRATAEGUS PYRACANTHA** ("Evergreen Thorn")—A thorny, thick-growing shrub with small leaves. The white flowers are followed by orange scarlet berries, making the plant beautiful during the winter. Pkt. 10c.



Eucalyptus

**CRATAEGUS CRENULATA**—Similar to the preceding but has smaller, rounder leaves and the berries are red. Pkt. 10c.

**CRATAEGUS YUNNANENSIS**—A low-growing, squat variety coming from Japan. The berries are very bright red and borne in great abundance. A handsome, rare variety. Pkt. 10c.

**CRYPTOMERIA ELEGANS**—"Fine leaved Japan Cedar." Fine foliage which turns red in the winter. A beautiful tree for the lawn. Pkt. 15c, oz. 50c.

**CYPRESSUS MACROCARPA**—"Monte-rey Cypress." 75 ft. Native of California. Extensively used for hedges and windbreaks. Pkt. 10c, oz. 30c.

**C. SEMPERVIRENS**—"Italian Cypress." A long-lived narrow tapering tree. Used in landscape gardening. Pkt. 10c, oz. 60c.

**C. ARIZONICA** ("Arizona Cypress")—One of the best cypresses, with a bluish cast to the foliage. Has a slender, upright growth and will thrive in almost any soil, standing both heat and cold. Pkt. 10c, oz. 50c.

**ESCALLONIA MONTEVIDIENSIS**—Attractive, evergreen, erect shrubs growing in almost any ordinary soil. Of very free flowering habit. White flowers in loose terminal clusters. Pkt. 15c, 1/8 oz. 50c.

**ENGLISH LAUREL** (*Prunus Laurocerasus*)—One of our handsomest evergreen shrubs. Is effective where ever planted. Broad leaves, leathery and glossy. Small white flowers in clusters. Seed very slow in germination. Pkt. 10c.

**FEIJOA SELLOWIANA** or **PINEAPPLE GUAVA**—An attractive evergreen shrub with glaucous foliage and purplish red waxy flowers. The fruit is delicious and may be eaten raw or cooked. A new and unusual plant well deserving a place in our gardens. Pkt. 15c.

## EUCALYPTUS

Should be sown in June or July in thoroughly prepared seed boxes. The beds should be kept moist at all times and watered only with a very fine spray. When seedlings appear water only in the morning to prevent damping off. The seedlings should be transplanted when 2 or 3 inches high, to other boxes or small pots, and should be ready to set out in February and March. One pound produces about 22,000 seedlings.

**E. Corynocalyx**—"Sugar Gum." 100 ft. This variety is the most drouth resistant of all, but will not stand much frost. Wood hard. Pkt. 15c, oz. 75c.

**E. Ficifolia**—"Scarlet Flowering Gum." The best of the red flowering varieties. 25 seeds 25c.

**E. Globulus**—"Blue Gum." Most rapid grower and best known species. Grows well along coast. Wood is durable and also good fuel. A profitable tree to grow. Pkt. 15c, oz. 75c.

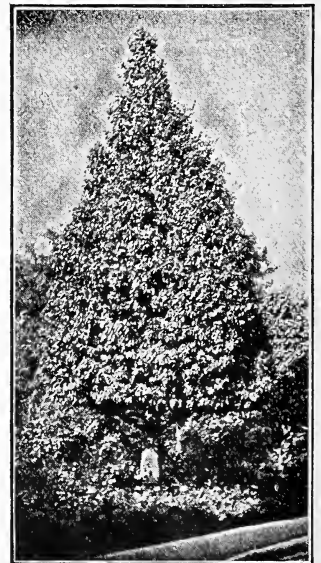
**E. Rostrata**—"Red Gum." A very tall variety. Withstands extremes of heat and cold. Grows most quickly in the hot sections. Is durable and useful for railway ties, etc., and also for cabinet work. Pkt. 15c, oz. 50c.

**E. Rudis**—"Desert Gum." Very valuable for hot arid sections. Wood durable. Good for street planting. Pkt. 15c, oz. \$1.00.

**E. Tereticornis**—"Forest Red Gum." Considered the best for general timber purposes. Grows well in hot and cold sections. The wood is unsurpassed for durability. Pkt. 15c, oz. 75c.

**E. Viminalis**—"Manna Gum." A hardy rapid growing variety well suited to exposed situations. The wood is softer than some, but is easier to work and takes a fine polish. Useful also for windbreaks. Pkt. 15c, oz. 75c.

**GENISTA FRAGRANS**—A pretty shrub, compact in growth, covered in the spring with bright yellow flowers. Pkt. 15c.



Sterculia Diversifolia

## TREE AND SHRUB SEEDS—Continued.

**GREVILLEA ROBUSTA**—"Silky Oak." A pretty tree with fern-like foliage. Orange colored flowers. Rapid grower and withstands drouth. Pkt. 15c, oz. 75c.

**HAKEA LAURINA**—An evergreen winter blooming shrub. Leaves long and narrow and the pink flowers are like small round balls. Very hardy. Pkt. 25c.

**HAKEA SALIGNA**—Similar to the above but the leaves are narrower and the flowers white. Pkt. 25c.

**HETEROMELES ARBUTIFOLIA** ("California Holly")—A native shrub of California, growing well along the coast or in the hot interior. A decorative plant, especially during the winter when covered with the deep red clusters of berries. Pkt. 10c, oz. 25c, lb. \$2.50.

**JACARANDA MIMOSAEFOLIA**—30 feet. A fine tree with fernlike foliage, bearing clusters of light blue flowers. Pod contains 30 or 40 seeds. 5c, a pod.

**JUNIPERUS CALIFORNICA**—"California Juniper." A small tree with dark green foliage. Pkt. 10c, oz. 25c. J. Virginiana—Red Cedar, 60 ft. A handsome well known tree. Pkt. 10c, oz. 35c.



Washington Robusta Palm

**KENNEDYA OVATA ALBA**—Low-growing, spreading shrub. Leaves oval. Flowers very attractive, forming a terminal short raceme of pea shaped flower. Pkt. 10c.

**KENNEDYA OVATA ROSEA**—Similar to the above with rose colored flowers. Pkt. 10c.

**KENNEDYA OVATA LILACINA**—Similar to other Kennedyas only with lilac colored flowers. Pkt. 10c.

**LEPTOSPERMUM LAEVIGATUM**—A rapid-growing shrub of drooping, graceful habit, succeeding well in California. Is not particular as to location, growing well in the interior and on the coast. Foliage grayish green and white flowers borne in great profusion. An evergreen. Pkt. 25c.

**LIBOCEDRUS DECURRENS**—100 feet. "Incense Cedar." A fine native tree of compact growth green foliage and red bark. Pkt. 15c, oz. 75c.

**LIGUSTRUM NEPALENSE**—"Small Leaved Privet." An evergreen shrub much used for hedges. Makes a thick, dense hedge, easily trimmed. Pkt. 10c, oz. 25c, lb. \$2.50.

**LIGUSTRUM JAPONICUM**—"Japanese Privet." A large shrub with thick, dark green leaves. Like the above, is much used for hedges. Pkt. 10c, oz. 25c, lb. \$2.50.

**MELIA UMBRACULIFORMIS**—"Texas Umbrella Tree." Deciduous. A well known shade tree. Withstands heat. Pkt. 10c, oz. 20c.

**MELALEUCA ARMILLARIS**—"Bottle Brush." A large-growing shrub of graceful drooping habit. Leaves are dense and needle like. Flower clusters white, cylindric in form and about 2 inches long. Is hardy and is generally planted in shrubby borders. Pkt. 15c.

**MELALEUCA HYPERICIFOLIA**—"Bottle Brush." A tall-growing shrub, bright green opposite leaves. Flower clusters a rich red. Very showy and one of the best. Pkt. 15c.

**MELALEUCA NESOPHYLLA**—"Bottle Brush." Similar to the above but more rapid growing. Flowers soft lavender pink. Pkt. 15c.

**PINUS CANARIENSIS**—"Canary Island Pine." A fast growing, robust tree, standing drought well. The foliage is a beautiful glaucous blue color. Pkt. 15c, oz. 50c.

**PINUS INSIGNIS**—"Monterey Pine." Native of California, growing well near the coast. Pkt. 10c, oz. 40c.

**PITTOSPORUM CRASSIFOLIUM**—A tall growing shrub. Gray-green foliage and red flowers. Pkt. 15c.

**PITTOSPORUM EUGENOIDES**—A large shrub or small tree. Handsome light green leaves and dark stems. Used for specimen plants or hedges. Pkt. 15c.

**PITTOSPORUM RHOMBIFOLIUM**—Ht. 20 feet. A handsome ornamental tree much used for street planting. Flowers white and followed by orange yellow berries lasting during the winter. Pkt. 25c.

**PITTOSPORUM TOBIRA**—A low-growing shrub with dark green leaves and fragrant pure white flowers. Pkt. 15c.

**PITTOSPORUM UNDULATUM**—(Wavy leaved.) Height 10 feet. A shrub or small tree which may also be used for hedges. Deep green, glossy leaves. Flowers fragrant at night. Pkt. 15c.

**PITTOSPORUM VIVIDIFLORUM**—A shrub with shiny green leaves and green flowers followed by yellow berries during the fall. Very fast growing and especially recommended. Pkt. 25c.

**PLUMBAGO CAPENSIS**—A spreading or climbing shrub with clean, smooth, light green foliage. Flowers pale blue, phlox-like in shape. Very free flowering. Pkt. 10c.

**SCHINUS MOLLE**—"Pepper Tree." A graceful well known tree with fine foliage and red berries. Pkt. 10c, oz. 25c.

**SEQUOIA GIGANTEA**—"California Big Tree." The tallest of all trees. A beautiful pyramid tree. Pkt. 15c.

**S. SEMPERVIRENS**—"California Redwood." A fast growing native tree with reddish colored wood. Ornamental. Pkt. 15c, oz. 50c.

**SOLLYA HETERAPHYLLA**—"Australian Blue Bell." A hardy evergreen climber or may be used as a spreading shrub producing many brilliant blue bell shaped flowers. Will grow in partial shade. Pkt. 10c.

**STERCULIA DIVERSIFOLIA**—"Victorian Bottle Tree." A fine tree for street planting. Glossy green foliage which varies in shape. Pkt. 15c, oz. 50c.

**SWAINSONIA ROSEA**—Shrub of rather spreading growth. The flowers resemble sweet peas though not fragrant and are borne in long erect sprays, are much used for cut flowers. Starts flowering early in the spring. Flowers rose pink. Pkt. 10c.

**SWAINSONIA RUBRA**—Similar to the preceding only the flowers are red. Pkt. 10c.

**THUYA OCCIDENTALIS**—"American Arborvitae." A good tree for planting in lawns. Bright green foliage, turns bronze in winter. Pkt. 10c, oz. 40c. T. Orientalis—"Chinese Arbor Vitae." A small growing tree. Bright green flattened foliage. Pkt. 10c, oz. 25c.

**THUYA ORIENTALIS AUREA**—"Golden Arborvitae." Similar to the above. The foliage beautifully tinged with gold in the spring. Pkt. 10c.



Phoenix Canariensis Palm

## PALM

All varieties may be sown in the open ground in mild climates except Cocos Palms. These latter require artificial heat. Some germinate quickly, others take as long as six weeks. Palms grow best in a well drained sandy loam.

**CHAMAEROPS EXCELSA**—"Windmill Palm." Leaves fan shaped, and deeply cut. The hardest palm we have, a fine lawn palm. Oz. 15c, lb. \$1.50.

**COCOS AUSTRALIS**—"Pindo Palm." A very ornamental palm with glaucous green leaves. Quite hardy. 10 seeds 15c, 100 for 75c.

**COCOS PLUMOSA**—A tall graceful palm, a rapid grower and a splendid variety for street planting. 10 seeds 20c, 100 seeds \$1.25.

**ERYTHEA EDULIS**—"Guadalupe Palm." 30 ft. A rapid growing variety. Fan shaped leaves of dark green. 10 seeds 15c, 100 seeds \$1.00.

**ERYTHEA ARMATA**—"Blue Fan Palm." A slow growing hardy palm, fine for lawns. Leaves a glaucous blue. 10 seeds 20c, 100 seeds \$1.50.

**PHOENIX RECLINATA**—A graceful palm large and withstands cold. 10 seeds 15c, 100 seeds \$1.00.

**P. CANARIENSIS**—"Canary Island Palm." The most graceful and the handsomest of our hardy palms. Leaves pinnate and a green color. One of the most effective for lawn planting. 15 seeds 10c, 100 seeds 35c.

**SEAFORTHIA ELEGANS**—One of the most beautiful for conservatory or protected gardens. Quite hardy. 10 seeds 15c, 100 seeds \$1.00.

**WASHINGTON FILIFERA**—The well known California Fan Palm. Grows 60 to 80 feet. Always a bunch of leaves hanging close to trunk. Oz. 10c, lb. \$1.00.

**WASHINGTON ROBUSTA**—A hardy Fan Palm. Leaves dark green without any threads. Pkt. 10c, oz. 25c.

## FRUIT AND NUT TREES

**BITTER ALMOND**

**MYROELAN PLUM**

**CALIFORNIA BLACK WALNUT**

**APRICOT**

**PEACH**

**WILD SOUR ORANGE**—Write for price.

Delivery January to April.

# A & M Selected Dahlias

## ORDER EARLY

Dahlia bulbs are ready for shipment about March 1st. You may include them in your order for seeds and they will be sent when ready. We do not advise ordering these after May 15th.

Our offerings of Dahlias are only those varieties which we have found to be entirely satisfactory to planters in general. There are hundreds of worthless varieties with which the amateur is not familiar, and would consequently have more difficulty in choosing properly if they were included among the listings. You may have no hesitancy in selecting any variety from this list. The size of the tuber does not in any way designate the size or quality of the flower. Some varieties produce very small bulbs while others are large, but the results are equally as good from small tubers as from large ones and frequently the best and most effective plants are produced from the small tubers.

## DAHLIA CULTURE

A bulletin on Dahlia Culture will be mailed free upon request and will be included with each order of Dahlias.

## A & M DECORATIVE DAHLIAS

Postage prepaid on all orders of \$2.00 or more; on all orders for less amounts add 15c for packing and postage.

The Decorative type of Dahlia is a large double flower, full to the center. Broad flat petals with broad points or rounded tips. They flower freely on long stems and are a popular type for garden show or for cutting purposes.

No.		Each
101	Alex Waldie—A large flower of creamy ground overlaid with salmon pink	\$1.50
102	Amun Ra—A strong grower producing immense blooms of burnt orange	2.50
106	California Superba—A delicate pink shading to white at the center. A fine keeper and prize winner.	4.00
107	Carolyn Wintjen—Lovely salmon pink with rose shading	.75
108	Champagne—Autumn shades, from burnished copper to chamois. One of the finest of the new varieties. The plants are vigorous and the stems strong.	5.00
111	Della V. Potter—Lavender pink. A long stemmed vigorous grower. The flowers are large and beautifully formed	.50
112	Earl Williams—A rich brilliant crimson with white tips. A popular variety. Plants free flowering	4.00
116	Glorieux—A beautiful deep golden yellow; petals usually tipped with white. A favorite.	2.00
118	Gustave Duzon—A popular variety for cutting. A brilliant orange red, full to the center. Plants are sturdy and free blooming	.35
119	Insulinda—A golden bronze overlaid with a sheen of gold. It has strong growth with rich green foliage.	2.00
120	John Elgus—A lovely combination of shades of bronze and orange. Fine straight stems	1.50
121	John Lewis Childs—Rich golden yellow splashed with red. A very free flowering and attractive variety.	1.50
122	King of the Autumn—An attractive buff and terra cotta blending, which is prized by florists for cut flowers	.50
123	Kitty Dunlap—A large flower of American Beauty rose, with deeper rose center. A full, beautifully formed flower on an upright stem. An excellent variety for all purposes	4.00
124	Lady Williams—Yellow suffused with orange.	1.00
125	Mabel Tart—Yellow tinged with apricot. Flowers large and full to the center.	.75
128	Mephistopheles—A rich ruby red showing golden yellow points at the ends of the petals. Unusually strong stems and a dahlia of special merit.	3.50
129	Millie Rodgers—A golden amber, large flowers and good stems	.75
130	Miss Quality—Amber buff. A variety of excellent growth and splendid keeping quality.	.50
131	Mrs. Paul Audette—A lovely apricot with pink reverse. Desirable because of its unique coloring and good cutting qualities.	1.50
132	Mrs. O. D. Baldwin—A bright rose pink. An excellent cut flower. Strong grower and good stems.	1.50
133	Mrs. F. C. Burns—Shell pink. A good stem, strong grower	.75
134	Mrs. Carl Salsbach—Mauve or lilac pink. A popular variety with long stems, much used for decorative work	1.00
137	Mrs. I. de Ver Warner—Deep mauve pink. One of the best	3.50
138	Polar Bear—One of the best white dahlias. Strong grower with good foliage and stems	1.00
139	Queen Josephine—Deep rich purple with white reverse. Full double flowers	1.50
140	Rosa Nell—A popular variety, pure bright rose in color. A strong grower with long stems.	1.50
141	Rookwood—A fine large flower. Bright cerise rose, and a prize winner. Excellent foliage and stems.	5.00



## DAHLIAS

Decorative Types—1, 2, and 3; Hybrid Cactus Types—4, 5, and 6; Cactus Type—7; Paeony Type—8.

142	Shudow's Lavender—One of the largest dahlias grown. A silvery lilac in color with fine stems and foliage. A noted prize winner	5.00
143	T. A. Leonard—A vivid crimson variety popular both for its color and vigorous growth.	3.50
145	Ysleta—A copper color shaded with yellow and suffused with rose. Very strong grower with good stems. One of the best for cutting.	1.00

## POMPON DAHLIAS

Postage prepaid on all orders of \$2.00 or more; on all orders for less amounts, add 15c for packing and postage.

These are the babies in the Dahlia world. Pretty, compact flowers of the show type are borne on long, stiff stems holding the blossom upright and making a most wonderful display of color in garden or vase. No garden in California should be without Pompons. They are so different and so dainty. The bulbs multiply the same as other Dahlias and may be divided each season.

No.		Each
201	Amber Queen—Lovely shade of amber	.35
202	Aimee—Bronze	.75
203	Clarissa—Yellow	.50
204	Daisy—Salmon pink	.50
205	Dewdrop—White tipped lavender	.35
206	Dorris—Cream	.50
207	Douglas Tucker—Yellow edged red	.50
208	Girlie—Pinkish Mauve	.35
209	Glow—Old Rose	.50
210	Joe Fette—White	.50
211	Little Beeswing—Red shading to yellow	.50
212	Little Johnnie—Deep crimson	.50
213	Mars—Bright red	.35
214	Neatness—Salmon pink cream center	.50
215	Nerissa—Rose tinted silver	.50
216	Nellie Fraser—Lavender pink	.50
217	Pure Love—Lavender	.35
218	Rosea—Rosy Lilac	.50
219	Sunny Daybreak—Apricot edged red	.50
	Named varieties mixed, our selection—6 for \$1.75, \$3.50 per dozen.	

**CACTUS AND HYBRID CACTUS DAHLIAS**

Postage prepaid on all orders of \$2.00 or more; on all orders for less amounts, add 15c for packing and postage.

The true Cactus type flowers are fully double, petals long, narrow, incurved or twisted, with sharp, divided or fluted points.

The Hybrid Cactus type flowers are fully double but the petals are shorter than those of the true Cactus type and are broader and more flat, though recurved and twisted. The stems of this type are usually strong and the plants prolific bloomers.

The stems of the true type are often weak and do not hold the flowers erect. We are offering only those with good stems and the best keeping qualities.

No.	Each
100 <b>Alabaster (Cac.)</b> —A pure white cactus.....	1.00
103 <b>Ballet Girl (Cac.)</b> —Orange and white, the flowers vary on the same bush from pure orange to many combinations of orange and white .....	2.00
105 <b>California Beauty (Hyb. Cac.)</b> —A popular variety both for its attractive amber copper color and for its excellent habit of growth .....	1.00
110 <b>Daddy Butler (Hyb. Cac.)</b> —A beautifully formed dahlia of rosy carmine. The twisted petals showing a lighter reverse. Good stem .....	3.50
114 <b>Evelyn M. Dane (Hyb. Cac.)</b> —Pink shadings to deep cream in the center. Large full flowers and exceptionally strong grower .....	2.50
115 <b>Gladys Bates (Cac.)</b> —An exceptionally attractive combination of tan with rose reverse. Blooms freely on long stems, flower often measuring 7 inches across..	2.00
117 <b>Golden West (Hyb. Cac.)</b> —This magnificent, large flowering Dahlia has been on the market long enough to be well known and the bulbs sell readily. The color is a yellow and orange buff. The flowers are very double and the stems are good .....	.35
126 <b>Mme. Butterfly (Hyb. Cac.)</b> —A violet rose shading darker at tips of petals. Fine for cutting.....	1.00
136 <b>Mrs. Ethel F. T. Smith (Hyb. Cac.)</b> —Lemon yellow shading, lighter at the center. Immense flowers and a profuse bloomer .....	1.00
144 <b>Vicar of Wasperton (Cac.)</b> —One of the best English cactus. A pale yellow at base of petals and shading into a deep pink. Strong grower with good stems....	1.50
146 <b>Constance (Cac.)</b> —A fine variety with good stems. Creamy yellow in color.....	1.00

**PAEONY DAHLIAS**

Postage prepaid on all orders of \$2.00 or more; on all orders for less amounts add 15c for packing and postage.

This type of Dahlia has broad, long petals. The flowers are large and full, generally showing the yellow center. They are free blooming and very vigorous growers. Excellent for cutting.

No.	Each
104 <b>Beverly</b> —We are offering this new seedling for the first time. It is a beautiful blending of gold and bronze, and a very attractive addition to this popular paeony class. Large and very free flowering.....	3.50
109 <b>Chanson</b> —A deep lilac with violet sheen. Good habit of growth and desirable for decorative work.....	2.00
113 <b>Elizabeth Boston</b> —Immense flowers of rich, deep crimson with gold tips. The flower has splendid keeping qualities and a fine stem.....	3.50
127 <b>Maid of Watts</b> —A pretty combination of yellow and apricot. Flowers freely and is useful for decorative work .....	.35
135 <b>Mrs. Jessie Seal</b> —A paeony flowered old rose, shaded gold. An exquisite combination. Its habit of growth is ideal for garden and as a cut flower.....	1.00

**COLLARETTE DAHLIAS**

Postage prepaid on all orders of \$2.00 or more; on all orders for less amounts add 15c for packing and postage.

Single open-centered flowers with a circle of smaller, narrower, usually different colored rays, forming a sort of collar between the large petals and the center.

No. 1—Pink and white collar. Each 50c.
No. 2—Yellow and orange red with yellow collar. Each 50c.
No. 3—Blood red and white. Each 50c.
No. 4—Bright red and yellow color. Each 50c.

**Miscellaneous Spring Flowering Bulbs****CANNAS**

Cannas have always been in demand and now with the wonderful new colorings and the improved size of flowers, they are even more popular. The large, handsome, ornamental foliage and beautiful spikes of bright flowers make the cannas ideal for mass plantings, backgrounds, borders or hedges. They may now be obtained in heights varying from 3 to 6 feet, and in colors of rose, red, orange, to pure white. Also some foliage is bright green and some a rich bronze. These new orchid flowering and large truss varieties bloom freely for six to eight months. In mild climates they are evergreen, but we recommend cutting away the old stalks in the winter to make room for the new growth. They should be separated every three years. Set the roots 12 to 15 inches apart. They flower more freely in sunny situations but grow well in partial shade, requiring at all times plenty of moisture.

**Red Varieties**

**Colossal**—Luxuriant foliage of rich green. Height six feet. The flowers are a bright, rich red and the largest of all. Very striking for a background or center of a group. 15c each, \$1.50 per doz.

**King Humbert**—One of the most popular Cannas. Immense orchid flowers of brilliant orange red often streaked with gold. Sturdy bronze foliage. Four to five feet high. 20c each, \$2.00 per doz.

**Uncle Sam**—Deep vivid crimson. One of the largest orchid reds. Green foliage. Five to six feet high, 10c each, \$1.00 per doz.

**Scarlet and Gold**

**Duca De Otranto**—A very lovely lily-shaped variety of golden orange, which changes to a glowing carmine. An interesting and wonderfully effective canna to grow. Green leaves. Four to five ft. high. 15c each, \$1.50 per doz.

**Orange and Scarlet**

**Panama**—Large flowers with big rounded petals of strong terra cotta red color. The throat and edges of the petals are spotted with golden yellow. Leaves green. The most unique and brilliant canna listed. 15c each, \$1.50 per doz.

**Pink Varieties**

**Hungaria**—A fine, clear pink. Flowers large with rounded petals. Dwarf, luxuriant, green foliage. Two to three feet high. 15c each, \$1.50 per doz.

**Wabash**—Large fine flowers, borne many in a truss, in color salmon-pink. Rich bronze foliage. Height four feet. 25c each, \$2.50 per doz.

**Orange**

**Indiana**—A bright, vivid orange. Fine shaped flowers in large trusses. Green foliage. Five to six feet high. 10c each, \$1.00 per doz.

**Wyoming**—A large, orchid flower of pure, rich orange. Handsome bronze leaves. Four feet high. 15c each, \$1.50 per doz.

**White**

**Eureka**—Full trusses of large flowers, an almost pure white. Very fine grower; green leaves; four to five feet high. 25c each, \$2.50 per doz.

**Yellow**

**Gold Bird**—In color a clear lemon yellow. The flowers are often 5 inches across, the petals being broad and rounded. Excellent green foliage. Three to four feet high. 15c each, \$1.50 per doz.

## SPRING FLOWERING BULBS—Continued.

## AMARYLLIS BELLADONNA

(Packing and Postage 15c per doz.)

This variety has luxuriant green foliage during the fall, winter and spring. During late spring the foliage dies off and in July and August the flower stalks rise from the bare ground with umbels of lovely, rose pink lilies. The flowers are fragrant and keep well. The bulbs should be planted during the fall, but do not always flower the first year if planted late.

Large size—25c ea., \$2.50 per doz.

Small size—15c ea., \$1.50 per doz.

## ANTIGONON LEPTOPUS

Called Queen's Wreath and Rosa de Montana. A rapid growing and lovely vine with heart-shaped leaves and bearing quantities of rose pink flowers in wreaths. Blooms in the summer and fall. A vine which will thrive in hot, sunny situations and if cut down by frost will come up again in the spring. Each 75c.

## BEGONIA

## (Tuberous Rooted)

Ready about January 1st

These are very satisfactory as summer bloomers. For outside beds, plant in a shaded location, covering the bulbs about one-half inch deep. Water lightly until growth starts. After the foliage has died down in the fall, lift them and store in dry sand. Tuberous Begonias make very good pot plants. Use a five-inch pot for each bulb filled with rich sandy loam and give the plants light but not direct sun. No bulb is more satisfactory for pot culture.

Single Scarlet, Yellow, Salmon, Rose. 35c each, \$3.50 per doz.

Double Scarlet, Yellow, Salmon, Rose. 50c each, \$5.00 per doz.

CALADIUM  
(Elephant Ear)

Ready for shipment December to April. A semi-aquatic plant, requiring a warm location and plenty of water. They may be kept growing throughout the year in most localities in this state, but should they be frosted down they will soon make new growth. The large leaves are very ornamental. 25c each.

CALLA ELLIOTIANA  
(Yellow Calla)

December 1st to April 1st

One of the most attractive flowers grown, suitable for outdoor bedding or for pot culture. The blossom is large and a deep golden yellow. The leaves are spotted white.

Small size—35c each, \$3.50 per doz.

Large size—50c each, \$5.00 per doz.

CINNAMON VINE  
(Dioscorea Batatas)

A shiny leaved rapid growing vine growing from a tuber which may be planted from December to spring. It is called Cinnamon Vine because of its clusters of cinnamon scented white flowers. The foliage dies during the winter and the new shoots start early in spring from old tuber. 15c each, 2 for 25c.

## GLOXINIA

Ready for shipment Jan. and Feb.

One of our handsomest summer blooming, tuberous-rooted plants. It makes a very fine pot plant, requiring about the same cultural directions as Begonia. One bulb to a 4-inch pot. The colors range through pink, scarlet, violet and white bordered. We are able to offer them in mixture only. 45c each, \$4.50 per doz.

## HARDY IRIS



Hardy Iris

(Packing and Postage 15c per doz.)

"Sweet Flag or German Iris"—This class of plants is becoming increasingly popular. They thrive in almost any soil or situation, growing well in shady places. They also require very little attention, but care should be taken that they have moisture in the summer or the leaves will burn and the plant will be retarded in its growth. The best time for dividing old clumps or setting new bulbs is the fall. The named varieties listed below will produce beautiful orchid-like blooms of large size and delightful fragrance.

## LILIES

Lilies deserve a place in every garden. They are beautiful, fragrant, and require little care except in planting. They should be planted eight to ten inches deep in soil which has been mixed with well rotted manure and sand. Lilies should not be disturbed. If planted in pots, observe same conditions, only covering to a depth of one inch. The pots should be plunged in soil and not watered until growth appears.

## LILIUM AURATUM

January 1st to March 1st

Gold Banded Lily of Japan. Flowers white, spotted crimson, with pure gold band running through center of each petal. Very fragrant and the most beautiful of all Japanese lilies. 35c each, \$3.50 doz.

## LILIUM RUBRUM

January 1st to March 1st

"Red Japan Lily"—Flowers white, shaded and spotted with crimson. Very fragrant. One of the best for cut flowers as the flowers do not all open at once. 35c each, \$3.50 doz.

## LILY OF THE VALLEY

These dainty little flowers are too well known to need description. We have the Lily of the Valley pips during December, January and February. If planted in a shady situation in a bed composed of leaf mold and sandy loam, they may become naturalized. Care must be given them during the summer and they should be separated every 3 years. 10c each, \$1.00 per doz.

## Named Varieties

Albert Victor—Large fragrant light blue. 25c each, \$2.50 per doz.

Alicazar—Standards lavender, falls velvety purple, bright orange beard, handsome. 50c each, \$5.00 per doz.

Caterina—Lovely light blue, strong grower. 25c each, \$2.50 per doz.

Celeste—A fine azure blue, solid color. 25c each, \$2.50 per doz.

Eldorado—Bronze violet tinged with gold. Very attractive. 35c each, \$3.50 per doz.

Fritzof—Standards soft lavender, falls purple, vigorous and large flowers. 25c each, \$2.50 per doz.

Honorabile—Standards yellow, falls rich mahogany brown netted yellow. 25c each, \$2.50 per doz.

Isolene—Standards lilac pink flushed yellow, falls deep old rose with golden shadings. 50c each, \$5.00 per doz.

Lohengrin—Lilac, also called Chinese violet, large ruffled flower. 25c each, \$2.50 per doz.

Lorelei—Standards light yellow, falls ultramarine blue bordered cream. 35c each, \$3.50 per doz.

Mrs. H. Darwin—Standards white, falls white, netted violet. 25c each, \$2.50 per doz.

Parisiana—White dotted, shaded and frilled with lilac. Large lovely flowers. 35c each, \$3.50 per doz.

Queen of May—Soft rose, flushed lilac, very beautiful. 25c each, \$2.50 per doz.

Stylosa—Lilac blue, earliest bloomer. 25c each, \$2.50 per doz.

## Common Varieties

	Per Doz.	Per 100
Blue Shades .....	50c	\$3.50
Purple .....	75c	5.50
White .....	50c	3.50
Yellow and Bronze Shades .....	75c	5.50

## MADEIRA VINE

## (Also Called Mignonette Vine)

A popular vine with round, glossy leaves growing from a tuber. Is much used for covering fences, porches, etc. A heavy frost will kill the foliage, but new growth will start again readily from the roots. Has small white fragrant flowers. Should be planted during the winter months. 10c each, \$1.00 per doz.

## TUBEROSES

(Mexican Everblooming  
Tuberoses)

The most fragrant of all tuberoses and a wonderful bloomer. Flowers are pure white and clustered from six to a dozen on stiff stems, making them excellent for cut flowers. The bulbs of these multiply from year to year, producing great masses which should be separated and transplanted every three years. They are very hardy and will grow and bloom in the warm inland valleys equally as well as on the coast. A dozen bulbs will plant a row six feet long. 10c each, 75c doz.

Excelsior Double Pearl—This variety is grown largely for its individual flowers which are large and double. The spikes are dwarf and full flowered. The culture is the same as for the Mexican variety. 10c each, \$1.00 per doz.

# A & M Gladioli

(Ready for shipment December to June)

Gladioli well deserve their unrivaled popularity. They may be planted from January to June for a succession of blooms. Gladioli will repay in full for all extra care and fertilizing. It is well in cutting to separate the leaves from the flower stem, allowing the leaves to remain. When completely dried this top growth should be cut off and the bulbs stored. These bulbs multiply and the bulblets will bloom the second year. The bulbs should be planted about 3 inches deep in any good garden soil, preferring an open sunny situation.

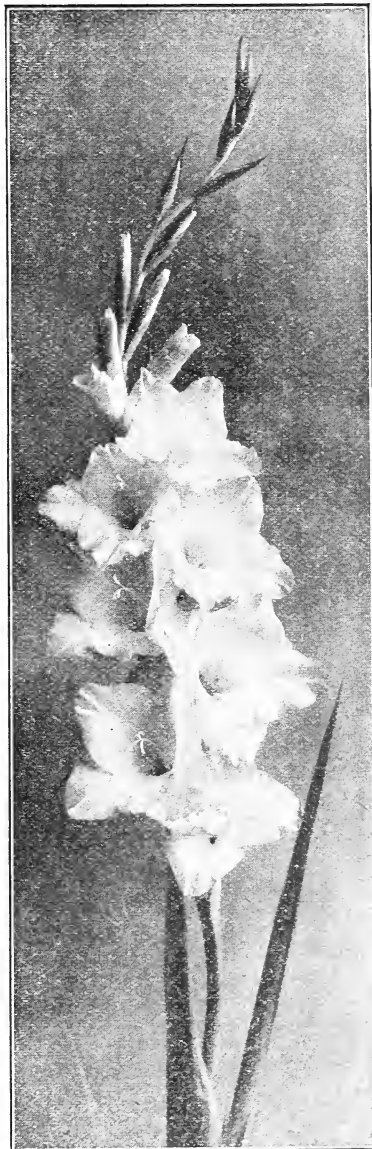
There are many new and wonderful varieties and some of the old ones are still leaders. We have tried to include the best of the new and standard varieties in our list. We are offering two colors and a mixture of Primulinus this season. This type of Gladioli is finding great favor among flower lovers. The flowers are smaller and the stems less stiff than the other Gladioli. The colors vary from cream, yellow and orange to bright red. They are excellent for cutting.

## NEW AND RARE VARIETIES

- Anna Eberius—Deep crimson. 35c each, \$3.50 per doz.  
 Golden Measure—A large, clear, deep yellow. 35c each, \$3.50 per doz.  
 American Beauty—The color of an American Beauty rose. Large flowers set close together on a strong stalk. 75c each, \$7.50 per doz.  
 E. J. Shaylor—A truly beautiful flower. In color a pure, deep rose pink. 20c each, \$2.00 per doz.  
 Purple Glory—A giant of Kundred origin. The deepest velvety maroon red. Each flower is beautifully ruffled. \$1.00 each, \$10.00 per doz.  
 Byron L. Smith—Light lavender with cream coloring in throat. Resembles a cattleya orchid. 25c each, \$2.50 per doz.  
 Early Sunrise—A large brilliant deep salmon with yellow throat. 25c each, \$2.00 per doz.  
 Rose Glory—A very large and ruffled variety. Pure rose pink, with deeper color in throat. 35c each, \$3.50 per doz.  
 Le Marechal Foch—Beautiful shade of light pink. 15c each, \$1.50 per doz.

## STANDARD VARIETIES

- Alice Tiplady—The most attractive of the Primulinus or butterfly type. The color is a most beautiful orange saffron. 15c each, \$1.50 per doz., \$10.00 per 100.  
 Baron Hulot—A true violet blue, a smaller flower but vigorous grower and one of the best in this color. 15c each, \$1.50 per doz., \$10.00 per 100.  
 Evelyn Kirtland—A tall graceful stalk with exceedingly attractive coral-pink blooms. 15c each, \$1.50 per doz., \$10.00 per 100.  
 Francis King—An old favorite, and very popular still for bright red flowers. 10c each, 75c per doz., \$5.50 per 100.  
 Grandeur—A deep vermillion pink. Very massive and quite distinctive and beautiful. 20c each, \$2.00 per doz., \$12.00 per 100.  
 Halley—A large open flower of salmon pink. Blooms early and is a popular cut flower. 10c each, 75c per doz., \$5.50 per 100.  
 Herada—Beautiful mauve. 15c each, \$1.50 per doz., \$10.00 per 100.  
 Ida Van—Salmon red. 10c each, 75c per doz.  
 Lily White—Pure white and an early variety. 15c each, \$1.25 per doz., \$8.50 per 100.  
 Mary Pickford—Cream, with throat a soft lemon yellow. 15c each, \$1.50 per doz., \$10.00 per 100.  
 Myrtle—One of the best pink Gladioli, being a delicate, arbutus or rose pink color. 20c each, \$2.00 per doz., \$12.00 per 100.  
 Mrs. Frank Pendleton—One of the grandest varieties. A bright rose pink, with a rich carmine red blotch on the lower petals. 10c each, \$1.00 per doz., \$7.00 per 100.  
 Mrs. Dr. Norton—A delicate pink, with cream throat. 15c each, \$1.50 per doz., \$10.00 per 100.  
 Panama—A fine, bright pink. Is a seedling of America, but brighter in color. 10c each, \$1.00 per doz., \$7.00 per 100.  
 Prince of Wales—A clear, delicate salmon pink. The finest of this color and one we highly recommend. An early variety and very popular for cutting. 15c each, \$1.50 per doz., \$10.00 per 100.  
 Schwaben—Soft pure yellow, with little red feather markings in the throat. 10c each, \$1.00 per doz., \$7.00 per 100.  
 Virginia—Brilliant scarlet. The most popular red variety. A vigorous grower with erect stalks. Exceedingly attractive for cutting or will give a grand mass of color when grown in beds. 15c each, \$1.50 per doz., \$12.00 per 100.  
 Golden King—Large golden yellow with crimson blotch. 10c each, \$1.00 per doz.  
 Niagara—A deep cream. The throat is splashed with lavender. A large flower. 10c each, 75c per doz., \$5.50 per 100.  
 Gretchen Zang—A soft pink blended with scarlet in the throat. 10 ea., 75c doz.  
 Lily Lehman—An ivory white. Lily shaped flower. 10c each, \$1.00 per doz.  
 Chicago White—White with lavender markings. 10c each, 75c per doz.  
 Princepine—Bright carmine red with white in throat. 10c each, 75c per doz.  
 Empress of India—Deep maroon red. 10c each, \$1.00 per doz.  
 Pythia—Brilliant red. Very large flower. Kundred. 50c each, \$5.00 per doz.  
 A & M Primulinus Mixed—A mixture of the finest and best of this type. Especially recommended for cutting. 10c each, 75c per doz., \$5.50 per 100.  
 A & M Choice Mixture—A complete range of colors including the newer finer sorts. 10c each, 75c per doz., \$5.50 per 100.



# Grasses for Lawns and Golf Courses

## HOW TO MAKE A LAWN

### ASK FOR OUR FREE BOOKLET

Soak the soil thoroughly to germinate all surface weed seeds. If a new home is being constructed, water ground freely while the house is under construction and keep the weeds pulled. This is very important for weed seeds are always present in the soil and if they are not germinated and pulled out before seeding the lawn they will give trouble later. The soil should be made mellow for a depth of 5 inches or more; deep cultivation allows deep rooting and this prevents the lawn being burned out under hot summer sun. The surface should be made perfectly smooth and level if possible, the top surface soil should be raked very fine and then rolled with a light roller. Stir surface very lightly with a light rake and sow seed with care, being sure all ground is covered light with seed then roll again. We do not advise raking in before the last rolling as seed is often thus covered too deep or bunched in places. If one desires, a light mulch of A & M Humus, pulverized manure or sand may be placed on the top after final rolling. Do not put any shavings on lawn. The first sprinkling after seeding is very important. Use a nozzle and apply a very light or fog spray until the surface is thoroughly soaked and the top soil set. Sprinkle twice daily in this manner until the green begins to show and then as often as is necessary to keep the soil in proper growing condition. Do not turn a stream on seed bed or wash sidewalks as this will wash seed especially away from edge of walk. Plant the A & M Velvet Lawn Grass at the rate of one pound of seed to 200 square feet of lawn. These few and simple rules if followed will give you a quick growing and satisfactory lawn.

## Straight or Mixed Grasses for the Greens and Fairways

We have always advised sowing grasses separately, rather than mixtures. When you buy them separately you get a minimum of foreign seeds and no chaff. On account of the different weight and sizes of seeds, a good job of sowing cannot be made with mixtures.

Our advice is corroborated by many green-keepers. Our Blue Grass is reclaimed at our own mill.

No two green-keepers hold fast to the same varieties of grasses. This is because of the difference in the nature of the soil, but it is conceded that Blue Grass is the best main crop. The greatest demand next to Blue Grass is for Australian Rye, Sheeps Fescue, Chewings Fescue, Red Top and Bermuda Grass. We specialize in these varieties and have the best.

We specialize in all requisites for the golf course. We have everything the Greens-Keeper needs.

Our salesman will call upon you, but do not hesitate to telephone us should you wish to see him between calls.

Our grass seed is tested in our own Laboratory (see page 2) for purity and germination. When there is need for it, the seed is reclaimed at our own mill. Our cleaning facilities are the best obtainable. When you buy your grass seed from us, you get clean seed of high germination.

### AGGELER & MUSSER SEED CO.

I take pleasure in saying that the seed you supplied The Southern California Athletic and Country Club at Elsinore were in every way entirely satisfactory.

—John Duncan Dunn.

## Bent Grass Stolons

We can furnish the very best strains of Bent Stolons; for either lawn, or golf course construction. (All of our strains are from Washington, D. C.)

Without doubt Bent is fast becoming the most desirable grass for greens construction on golf courses and the propagation of this grass by stolons is recommended by the Department of Agriculture at Washington, D. C.

Write for prices.

We can also furnish seed of German Creeping Bent. Get our price.

## A & M VELVET LAWN GRASS

The perfect lawn is only obtained by sowing a blend of several varieties suited to conditions and climate. The most beautiful lawns in California are made with A & M Velvet Lawn Grass. This well known Lawn Grass is blended to produce a closely interwoven velvety turf of fine bladed dwarf grasses. When seeded and watered properly it will be ready for cutting the first time in about twenty days from seeding and the tiny plants will immediately stool to a heavy turf of a bright velvety green. A & M Velvet Lawn Grass was blended by us after years of study and close observation of root growth and turf in our trial plots. Is particularly adapted to climatic conditions similar to California and the south-western states except the extremely warm interior valleys (Per lb. 90c, 5 lbs. \$4.25, 10 lbs. \$8.00.)

## Interior Valley Lawns

For Imperial Valley and similar climates we recommend Bermuda Grass for the summer lawn and A & M Australian Rye Grass for October planting. After the Bermuda sod is established it may be raked and trimmed closely or the entire surface shaved off with a sharp hoe, after which A & M Australian Rye Grass should be seeded at the rate of 2 lbs. to 10x10 feet and covered with a light mulch of well rotted manure. The Rye Grass provides a green winter lawn which is replaced by the Bermuda sod as summer approaches, Bermuda being the only satisfactory lawn grass which will withstand the excessive summer heat.

**Fancy Kentucky Blue Grass** The purest and best of this seed. Produces a lasting and beautiful effect. We sell only the finest quality of this seed. (lb. 70c) (5 lbs. \$3.00) postpaid. Write for price on quantity.

**White Dutch Clover** Makes a showy effect much quicker than the Blue Grass. In conjunction with the Blue Grass, however, it forms the finest and closest turf. (lb. \$1.10) (5 lbs. \$5.00) postpaid. Write for price on quantity.

**Pacific Rye** Similar to the Australian and used for the same purpose. It is somewhat coarser and more hardy. Ask for price.

**Red Top** A very fine bladed grass, quick to establish itself and on that account it is extensively used with the first planting together with other grasses in order to have a dense turf as quickly as possible.

**Australian Rye** A very desirable perennial grass generally preferred for fairways and makes a beautiful lawn. Ask for price.

**Italian Rye** An annual. May be sown on close clipped Bermuda in fall for green all winter. In summer it disappears. Grows very rapidly. Must be sown each fall.

**Bermuda Grass** Undoubtedly the best of all for endurance for which reason it is used on all polo grounds and on many fairways. Its natural tendency to become dormant during the winter months discourages planting. Also its tendency to mat when an excessive amount of water is applied is a drawback to a more general use. Notwithstanding these drawbacks, it is the best grass known for endurance. Ask for price.

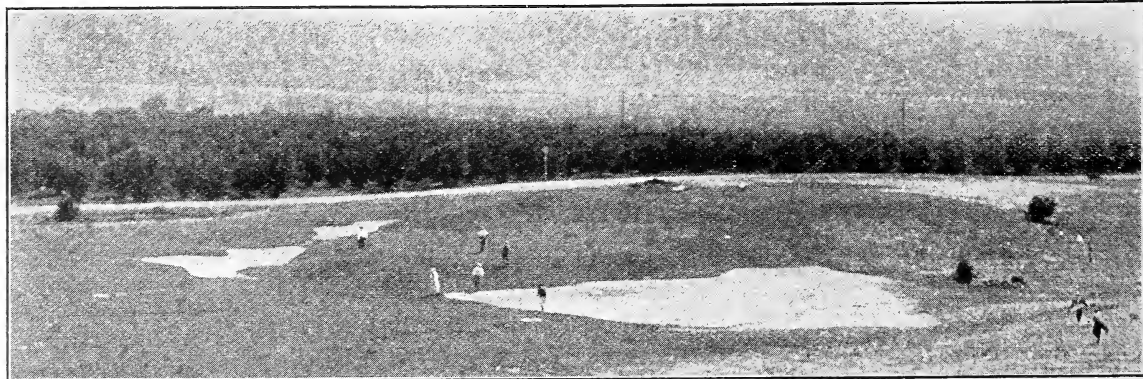
**Chewings Fescue** It is very finely bladed and makes a beautiful and lasting green. We give it special recommendation for shady places. Ask for price.

**Sheeps Fescue** Similar in appearance to Chewings Fescue but more bunching. It is very desirable for planting in the rough. Ask for price.

For Seeders, See Farm Requisites

## Lawn Rollers

The new water ballast lawn roller may be filled with water to any desired weight. Price \$18.50 to \$25.75.



Course of Southern California Athletic and Country Club at Elsinore

# GRASSES

**Sudan Grass** Has made good and has become more popular each year. It is not particular as to soil—endures much alkali—an annual—planted during April, first cutting in sixty days may yield four tons of dry hay per acre and three to four tons may be cut each thirty days until October.

Twelve pounds of seed is required to plant an acre in order to produce hay of fine quality.

The seed may be planted with a Superior beet drill or other drill with extra plate or sow broadcast.

Sudan Grass thrives with excessive moisture and endures extreme drouth. The foregoing points are not all the best features of this grass. In the months of August and September, when all other grasses are dry, then is the time that Sudan is most valuable for fall pasture for cattle and hogs.

Sudan Grass is ideal for growing with the Whip-Poor-Will Cow Peas. The stem is stiff enough to support the vines, and the mixture makes a better balanced ration for the stock. It is a good silage. It is a good thing to plant in old alfalfa fields. (Per lb. 30c) (10 lbs. \$2.50) postpaid. Write for quantity price.

## HARDING GRASS

### THE GREATEST PASTURE GRASS

This grass is a true perennial, one seeding being good for years. It cannot become a pest because all spread is from the crown. It never bloats. Will stand heavy tramping of sheep or cattle. Under good conditions it should carry one cow per acre 10 months of the year, after the second season.

Old pastures or burned over land should be sown after the heavy winter rains have set in.

(Per oz. 50c) (lb. \$3.50) postpaid.

## RHODES

(CHLORIS CAYANA)

(Write Department of Agriculture, Washington, D. C.)

Ask for Farmers Bulletin No. 1648

Mr. Dairyman, there is no longer any excuse to permit any alkali lands to be wasted with tar weed. Your alkali lands are now a valuable asset. Rhodes grass will increase the value of these acres several fold. See what Mr. Campbell has done and be convinced.

Rhodes grass does not grow underground sprouts like Johnson or Bermuda grass, but sends runners over the surface like the strawberry plant. It is easily eradicated.

Rhodes Grass will smother Bermuda and other weeds because of its dense growth. It is easily eradicated by being plowed once and let stand for sixty or ninety days. It adds humus to the soil.

The best time to plant Rhodes Grass is from March 1st to August 1st. Broadcast twelve pounds of seed per acre, going over the field twice, once north and south and east and west, sowing six pounds each way. Keep the soil continually moistened until the grass is established. Do not pasture until after the second cutting.

(Per lb. 85c) (10 lbs. \$7.50) postpaid. Write for quantity price.

## BERMUDA

(Cynodon dactylon)

Bermuda Grass is unquestionably the best pasture grass in the south, viewed from the standpoint of palatability, productiveness and endurance. There are reasons for believing that in its proper sphere it will produce more grazing and more meat than blue grass under the most favored conditions. Sheep can graze upon it from 7 to 9 months in the year according to locality. Sow seed during May and June, five pounds per acre. (Per lb. 50c) (10 lbs. \$4.50) postpaid. Write for quantity price.

## CHEWINGS FESCUE

(See Lawn Grass)

One of the best grasses to sow in a meadow. Mixed with Red Top and White Clover it is a valuable pasture grass. It is also suitable for lawns and putting greens. Sow 20 lbs. per acre. (Per lb. 60c) (10 lbs. \$5.50). Write for quantity price.

## DALLAS

(Paspalum dilatatum)

This grass should be established on pastures.

Grows on any kind of soil—endures some alkali—excellent for permanent pasture on marsh or mesa—grows winter and summer with moisture—excellent for hay—may be cut every six weeks—becomes dormant with drouth but revives with less moisture than any other grass, yet will survive if submerged for several weeks—stools and seeds freely. It has been tried and proven in this section to be one of the best of grasses for permanent pasture in meadows, in swamp lands.

The seed takes root among the weeds and devil grass, choking out everything in its way. The dense matting roots make a thick sod capable of supporting the cattle on marshy land. The stock relish it fully as well as alfalfa. It is as easy to eradicate as Timothy or as any other bunch grass. Ten pounds is sufficient to sow one acre broadcast. It thrives in high altitude.

The second year's growth of Dallas Grass on our trial ground excels all the low bent grasses for quick recovery after drouth.

(Per lb. 75c) (10 lbs. \$6.50) postpaid. Write for quantity price.

## PACIFIC RYE

An excellent hardy grass for the coast range, on hillsides and meadows. It resists drouth wonderfully and is quick to recover after a slight rainfall. Sow 30 lbs. per acre. (Per lb. 35c) (10 lbs. \$3.00) postpaid. Write for quantity price.

## PERENNIAL RYE

(See Lawn Grasses)

Sow in the fall with barley, oats, wheat or alfalfa, to be pastured. It is excellent for fattening cattle.

Sow 20 pounds per acre. (Per lb. 35c) (10 lbs. \$3.00) postpaid.

## ITALIAN RYE

(Lolium italicum)

Arrives earlier at maturity than Perennial and produces a large amount of nutritious herbage. Its duration being but two or three years, it is not adapted for permanent pastures, yet highly valuable for rotation of crops. It is specially adapted for sowing in autumn with oats, barley, rye or clover, as a catch-crop for fattening stock. Sow 30 pounds per acre. (Per lb. 35c) (10 lbs. \$3.00) postpaid. Write for quantity price.

## ORCHARD

COCKSFOOT

(Dactylis glomerata)

This grass does well sown either with or without other grasses. It is frequently sown in such pasture mixtures as white clover, red clover and rye grass. If sown alone, 25 or 30 pounds of the Cocksfoot seed will insure a good stand of grass.

(Per lb. 50c) (10 lbs. \$4.50) postpaid. Write for quantity price.

## RED TOP

(Agrostis vulgaris)

Red Top is a perennial grass which grows from a few inches to five feet in height under varying conditions of soil and climate. But the average height is probably 18 to 20 inches. It is now more highly esteemed as a pasture grass than for a hay.

No other useful grass would seem so well adapted for growing in wet situations, even in places so moist as to be saturated with water for a considerable portion of the late autumn and the early spring.

The soil should be carefully prepared. Thoroughly pulverized and clean of weeds. Sow broadcast 14 lbs. of seed per acre.

(Per lb. 50c) (10 lbs. \$4.50) postpaid. Write for quantity price.

## RUSSIAN BROME

(Bromus inermis)

Bromus inermis is one of our hardest perennial grasses; no amount of cold will kill it. It withstands the severest drouth, and water may stand on it for weeks. It will grow on any rich soil.

It requires twenty pounds of seed per acre.

Russian Brome Grass is essentially a winter pasture grass, but it also makes good hay. All kinds of stock are fond of it, and no other grass, unless it be orchard grass, will furnish grazing for so large a portion of the year. Its producing and feeding value for hay is about equal to that of timothy.

It keeps alive under conditions that would destroy many other grasses and it will then grow vigorously when moisture is brought to it. It can be made to render excellent service in states where rainfall is not more than 12 to 15 inches.

(Per lb. 60c) (10 lbs. \$5.50) postpaid. Write for quantity price.

## ALFILARIA

(Erodium cicutarium)

Alfilaria or "filaree" grows wild without any attention in all classes and conditions of soil except swamps and excessive alkali. Soon after the first heavy fall rains have saturated the ground the "filaree" begins to make its appearance. It is good pasturage at all stages of its growth, even when mature and dried up. In nutritive qualities it compares favorably with alfalfa and live stock of all kinds fatten on it readily. It is hardy even where the winter temperature reaches zero or below. Little or no preparation of the soil is required. It attains perfection where introduced in Texas.

Sow 6 lbs. of seed per acre. Sow just before the rainy season.

(Per lb. 85c) (10 lbs. \$7.50) postpaid. Write for quantity price.

## AUSTRALIAN SALTBUSH

(Atriplex semibaccata)

Cardinal points: For range near the coast or interior lowlands where fogs are of frequent occurrence—any kind of soil—endures much alkali—thrives with a minimum of moisture—very succulent during winter, spring and early summer, it is relished by all stock—becomes parched by heat in late summer, then it is less palatable to stock, but they will thrive if forced by hunger to eat it—it seeds freely. Requires no preparation of soil for seeding. Cannot cut and dry as hay—has one tap root—easily eradicated.

(Per lb. 85c) (10 lbs. \$7.50) postpaid. Write for quantity price.

## SMILO

(Oryzopsis miliacea) Many Flowered Millet

(Recommended by the University of California.) It is a hardy evergreen perennial, drouth-resistant bunch grass that thrives on dry hills among rocks and brush, and is a wonderful producer when planted in good soil but must have sufficient moisture to get good root system before the dry season. It also thrives under trees.

Smilo will not become a pest, as it has fine fibrous roots which penetrate very deep, but is easily cultivated out.

Do not plant seed over ¼ inch deep. Better sow on top of ground and harrow lightly. When planted deep we have known Smilo seed to be in the ground two years, but as soon as brought to the surface and got sufficient moisture it came up and made a good stand.

When possible plant seed before fall rains, during September and October, so that it may get a good root system during the cold weather that it may withstand the following dry season.

(Oz. 50c) (lb. \$3.00) (10 lbs. \$26.00) postpaid.

## Soil Renovators for Winter Crop

### Inoculate with Mulford Culture

**Melilotus alba** I have come to the conclusion that, except on sandy soils, it is better to broadcast the seed than to drill it. This is especially true where there is alkali. Sweet-clover seed should be very close to the surface. A light harrowing or dragging with a light brush drag, will mix the seed with the soil sufficiently for germination. It is better, too, to sow the seed in the fall and let the rains bring it up. It gets a better start that way.

Melilotus alba is being recognized more and more each season as a valuable soil renovator. Because of its large and extensive root system penetrating deep into hard subsoil, there decaying, permits moisture to enter and break up the hardpan that plowing may become deeper and more thorough. These roots have gathered nitrogen and add much humus, all of which is essential to building up new or run-down soil.

Melilotus has other uses in soil renovating; it will grow in alkali soil and reclaim it. It will eradicate Bermuda and Johnson grasses; therefore, if you have any land that will be benefited by Melilotus alba by all means plant it. (Per lb. 35c) (10 lbs. \$3.00) postpaid. Write for quantity price.

**Canadian Field Pea** When it is too late to plant vetch or Melilotus plant Canadian Peas.

They may be planted as late as January and yet be plowed under in time for planting a summer crop. If your summer crop, like melons and potatoes are not harvested until November plant Canadian Peas.

Neither is the Canadian Pea inferior to other cover crops when planted at the right time. The right time is from September until February and on any kind of soil.

Notice—Do not plant just before a rain nor irrigate before they are well above the ground and established. If the soil is too wet after planting the seed will rot. (Per lb. 25c) (10 lbs. \$2.00) postpaid. Write for quantity price.

**Hubam Clover** Hubam is an annual sweet clover planted in citrus groves during February or March; it forms a perfect cover of green clover that will greatly reduce the fall of oranges known as the "June drop." It is at its best stage for green manuring to be plowed under during July and August.

Stock relish it therefore it is good for pasture. The flowers are rich with honey and on that account it should be sown largely by bee men. It requires about 10 lbs. of seed to plant an acre. (Per lb. 60c) (10 lbs. \$5.00) prepaid.

**Melilotus indica** become recognized as the legume best adapted for green manuring in the orchards of California. Was introduced by us in 1909, has now because it may be planted late in the fall after all crops have been harvested, will grow all winter with only the season's rainfall.

It prevents erosion during the rainy season, is easily plowed under, is richer as a fertilizer and if allowed to stand until July will prevent much of the June drop.

Melilotus indica is the best legume with which to build up your soil during the rainy season for the summer crop to follow, particularly potatoes and melons. (Per lb. 25c) (10 lbs. \$2.00) postpaid. Ask for quantity price.

## OREGON WINTER VETCH

**Vetch** For many years was considered the best legume for planting in orchards during the rainy season. It is only because Melilotus indica is a little harder that vetch now holds second place for that purpose; but science has discovered a new use for vetch. It is true that oaks have long been planted together with vetch for the purpose of supporting the vetch that it may be easy to harvest. Now the new discovery is that vetch may be planted with oats, wheat, rye and barley in order that the grain will be fertilized by the nitrogen gathered at the roots of the vetch, thus greatly increasing your crop of grain, or if grown for hay it nearly doubles the yield. Twenty to thirty pounds of grain sown with twenty pounds of vetch per acre, will yield more and better hay than sixty pounds of grain per acre if sown by itself. (Per lb. 25c) (10 lbs. \$2.00) postpaid. Write for quantity price.

**Purple Vetch** The chief value of Purple Vetch as compared with the common is in the rapid growth making it desirable both for fall and spring planting. The spring planting in citrus orchards prevents the June drop and is in prime for July plowing. It is a legume and therefore it is good fertilizer for the orchard. (Per lb. 25c) (10 lbs. \$2.00) postpaid. Ask for quantity price.

## HUNGARIAN VETCH

### SOMETHING NOT GENERALLY KNOWN

We have had some inquiry for Hungarian Vetch and not being familiar with this variety we wrote to our grower and here we print the reply:

Gentlemen:  
In reply to your letter regarding Hungarian Vetch would say in describing it that it has a white blossom, is a very hardy vetch and yields about the same as common vetch in forage but yields more seed. We like it much better than common vetch because it is so hardy and will grow on wetter land, also it is aphid-resistant which is a big advantage here on the average.

Another thing, the pods of Hungarian do not shatter as do the other vetches; pods will lie out on the ground clear up until the fall rains come even then without shattering the seed. The Hungarian seed is smaller and the vetch stools well so that with early sowing an excellent stand can be obtained from light seeding.

I had one five acre piece that yielded over 1,200 pounds of seed to the acre after it was recleaned, having seeded only 23 pounds per acre. Comparing it with Purple Vetch, it is much harder, here we lose Purple Vetch about every fourth year due to freezing while the Hungarian is not damaged in any way.

Hungarian as will the others, responds readily to light applications of land plaster, from thirty to fifty pounds to the acre will work wonders. We received from three to three and one-half tons to the acre of hay from it last year. Hungarian Vetch is of special value to dairymen because of the greater yield, and stock like it better than any other variety.

Price (per lb. 30c) (10 lbs. \$2.50) postpaid.

**Broad Windsor Bean** Sometimes called Horse Beans, grows upright on a single stem bearing a profusion of large well-filled pods. The roots are enormously productive of nitrogen. It will withstand 28° temperature; therefore, may be planted as late as September for best results as a winter cover crop. (lb. 25c) (10 lbs. \$2.00) postpaid. Write for quantity price.

**Small Windsor** (Small Horse Bean) This is identical with the Large Horse Bean except that it will not grow as large, but is preferred by many for green manuring because of the smallness of the seed it requires fewer pounds to plant an acre and it is argued that more plants per acre will produce more nitrogen.

Its popularity has greatly increased during the year just passed and this is evidence that it has some advantages over the large Horse Bean. (Per lb. 25c) (10 lbs. \$2.00) postpaid. Write for quantity price.

**Bell Bean** Similar in appearance to the small horse bean used so extensively throughout California for green manuring. The Bell Bean is very popular throughout the British Empire for the reason that it grows a heavier crop, slightly taller and more branching, and less susceptible to aphids, which is important to citrus growers. It is resistant to frost therefore should be planted during September or October, about 30 lbs. per acre. Write for price.

## Soil Renovators For Summer Growing

**Whip-poor-Will Cow Pea** For more than twenty-five years the Whip-poor-Will has been the standard summer crop for green manuring not only here but throughout the South. Why? (See picture.)

(1) It will grow on practically all kinds of soils, whether sandy or clay, poor or fertile.

(2) It is of the easiest culture.

(3) It has a big, strong, deep-root system, well supplied with large nitrogen gathering nodules.

(4) It revels in summer heat, and is extremely drought-resistant.

(5) It grows very rapidly, shading the soil from excessive heat, and leaving no room for noxious weeds.

(6) It greatly benefits the succeeding crop by accumulation of nitrogen in the soil.

(7) It leaves the soil in fine physical condition for the fall planting of grain or other winter crop.

(8) It produces an abundance of highly nutritious pods and leaves in a few months.

(9) It may be made into hay or ensilage, or pastured, the seeds may be used for stock feed or human consumption.

Plant 20 lbs. per acre any time from April 1st until Sept. 1st. (Per lb. 25c) (10 lbs. \$2.00) postpaid. Write for quantity price.

**Brabham Cow Pea** It has only recently been determined definitely that the Brabham is resistant to nematode. This discovery places the Brabham foremost as a desirable summer crop for green manuring. Few districts are free from nematode and while other crops nursed it thus spreading it over wider territory, the Brabham will discourage its development and if repeatedly planted may eradicate it from the field in which the Brabham is grown.

Under the light of the discovery that the Brabham pea is resistant to the nematode, to plant it would seem the wisest thing to do. (Per lb. 25c) (10 lbs. \$2.00) prepaid. Write for quantity price.

**Soy Bean** The Soy Bean is being more generally used as its merits become known. The importation of the Soy Bean from the Orient makes it unprofitable to grow for commercial beans or for seed but for early spring planting, for June cover crop and for green manuring it is very valuable and under certain conditions of soil may be preferred to clover or vetch. It is harder than the cow pea and on that account may be planted earlier. It is valuable to grow in young vineyards either to be plowed under or for green feed for dairy cows. (Per lb. 25c) (10 lbs. \$2.00) prepaid. Write for quantity price.

# A & M Alfalfa

INOCULATE WITH MULFORD CULTURE

## Chilean or Common

This variety has proven so entirely satisfactory to everyone and is indeed now so thoroughly satisfactory that many will hesitate to believe that any variety of alfalfa can be better.

Write to the University Farm, Davis, Cal., and ask for their latest reports concerning Hairy Peruvian alfalfa as compared with the Chilean or Common Alfalfa, or write us for our Alfalfa bulletin.

We have often been asked where the seed which we sell was grown, some being under the impression that Alfalfa seed produced in particular sections is preferable, but we have found, through careful investigation, that such is not the case and no certain section is favored in producing superior seed.

If the stock is of high germination, free from noxious weed seeds, and true to name, that is the great consideration.

Write for quantity price. We first offered this variety in 1918.

**Hairy Peruvian** It is harder and it does produce more hay the first year than common alfalfa, but it does not endure as well. Many large growers now prefer the common alfalfa. With these comments we offer the Hairy Peruvian Alfalfa to those who may have had better results and yet prefer it. Write for quantity price.

A Virginia Bulletin, No. 207, page 10, says: "Many failures in growing alfalfa may be attributed to lack of inoculation."

Wherever we find successful old fields of alfalfa, if the roots are carefully dug up and examined the supply of bacteria nodules will be found to correspond to the vigor and quality of the plant."

## Nurse Crop with Alfalfa

As a rule on Sandy lands that are subject to drifting, or on heavy lands which have a tendency to bake, a nurse crop may be of benefit as it reduces drifting or baking. Unless the soil is subject to drifting or baking it is not advisable as a general rule to use a nurse crop. Under dry land conditions a nurse crop should never be used, as the moisture supply is too limited. JAMES MARSHALL, Colorado Agricultural College.

If you would have a nurse crop sow Broom Corn Millet.

Tests undertaken show that the combination of lime and sulphur has proved a great success for alfalfa on light soils. In certain cases sulphur alone seems sufficient.

With sulphur alone 220 pounds per acre are used, and when lime also is applied only 110 pounds of sulphur are used and 300 pounds of lime.

## SWEET CLOVER FOR FORAGE

**Melilotus alba** This is a valuable addition to the farm as a forage crop. When quite young, it may be pastured or cut and cured for hay. This should be done just before the bloom appears. It is harder than alfalfa, more drought-resistant, and better for renovating the soil. It may be cut twice the first season and three or four times the second season, yielding 2500 to 3000 pounds of hay each cutting. It is as easy as alfalfa to eradicate, is biennial. On account of its hardness to resist extreme cold, heat and drought it is grown largely for pasture. It is highly recommended by the Department of Agriculture. (Per lb. 35c) (10 lbs. \$3.00) postpaid. Write for quality price.

**Red Clover (Common)** This clover is quite familiar to the rancher from the eastern states where it is to the dairyman what our alfalfa is here.

It is harder than alfalfa, therefore we recommend it for higher altitudes or farther north than the San Joaquin Valley where it will not be subject to the hot dry atmosphere of the interior valleys nor to the climate of Southern California. There is a place for Red Clover, but not where alfalfa thrives. (Per lb. 60c) (10 lbs. \$5.00) postpaid. Write for quantity price.

**Mammoth Red Clover** In England and in English Colonies this clover is called "Cow Grass." The name recommends it to dairymen.

The same instructions for common Red Clover apply also to Mammoth Red Clover. (Per lb. 60c) (10 lbs. \$5.00) postpaid. Write for quantity price.

**Alsike or Swedish Clover** This is one of the hardest varieties known. It is perennial and does not winter kill. It will do better on moist land than any other variety of clover, and is suitable for either hay or pasture. When sown with other grasses it forms a thick undergrowth and greatly increases the yield. (Per lb. 50c) (10 lbs. \$4.50) postpaid. Write for quantity price.

California Experiment Station (Bulletin 292) reports eight years' results where legumes were grown annually and turned under. The legume plots were checked against plots that were green manured with non-legume crops. In these experiments there was an annual average increase in corn amounting to 14 bushels, which amount contains 12.93 pounds of nitrogen. There was also an annual average increase of 62 bushels of potatoes which contain 12 pounds of nitrogen.

New Jersey Experiment Station (Bulletin 289) records the results of four years of wheat after soy beans, obtaining an average annual recovery of 54 pounds increase in nitrogen in the crops. In the same bulletin it is stated that the legume green manure furnished at least as much nitrogen as 15 tons of manure.



Inoculate Your  
Alfalfa, Clovers, Cow Peas, Soy Beans, Vetches  
and  
Other Legume Crops  
WITH  
**Mulford Cultures**  
FOR LEGUMES

Small Cost      Large Returns      Easy to Use      No Labor Expense



Mulford Cultures contain pure, tested strains of active, vigorous nitrogen-fixing bacteria, for inoculating seeds of legumes or soil.

Mulford Cultures are scientifically prepared and tested with the utmost care and skill. Enormous numbers of these very valuable and desirable bacteria are thus available to you in every package of Mulford Culture and may readily be applied to your seed. The sealed bottle insures purity.

Legumes offer the best known means of maintaining soil fertility and rejuvenating over-cropped and worn-out fields. They add both humus and nitrogen to your soil and thus increase your yield of wheat, cotton, corn and other non-legume crops.

Always specify on your order what crop you want to inoculate, as there is a different strain of bacteria for each legume.

Alfalfa	Vetch	5-Acre Size .....	\$5.00
Crimson Clover	Velvet Beans	1-Acre Size .....	1.50
Sweet Clover	Sweet Peas	1/4-Acre Size .....	.75
Red Clover	Garden Peas	Small Size (Supplied only in four va-	
Alsike Clover	Garden Beans	rieties, for Garden Peas, Garden Beans,	
Burr Clover	Lima Beans	Lima Beans and Sweet Peas.....	.35
Cow Peas	Lespedeza		
Soy Beans	Beggar Weed		
Peanuts	and others		

## SPECIAL NOTE

The quantity of bacteria furnished in the Mulford Cultures is based on the area or acreage to be inoculated and we recommend that, for best results, the cultures be used on this basis. You will find it the most economical and effective plan, in the long run.

In the case of some crops, which are sown with a comparatively small amount of seed per acre, there is sufficient Mulford Culture in a package to inoculate seed for two or three times the acreage indicated on the label.

If you are willing to risk the success of your crop by spreading the culture more thinly over a larger area, you will find Mulford Cultures to be the most economical form of legume inoculation on the market.

FREE DESCRIPTIVE FOLDER SENT UPON REQUEST



# THE WONDER FORAGE



Wonder Forage—Our Seed Field

## THE WONDER FORAGE PLANT

It stools from ten to forty full sized stems the thickness of a thumb and smaller. When the main stems mature, separate branches grow from each joint bearing other seed-heads.

## SACCHARINE SORGHUM

**CULTURE:** All sorghums, saccharine or non-saccharine, should be sown in rows 30 or 36 inches apart, using five or six pounds of seed per acre. If irrigated it is necessary to cultivate it after each irrigation. It is advisable to give a shallow cultivation every two or three weeks until it becomes too large. The sorghum is ready to cut for the silo when the seed has matured.

At our demonstration of Sorghums the Silver Tip outclassed all other varieties for tonnage of green fodder. Texas Seeded Ribbon Cane was next in line. It is more branching than others.

**Silver Tip** The Sorghum for syrup. A local manufacturer of Sorghum syrup says: "The Silver Tip excels all other Sorghums in quantity and quality of syrup. A yield of 400 gallons per acre was the average obtained from my field. It will yield 20 tons of silage at one cutting."

(Per lb. 25c) (10 lbs. \$2.00) postpaid. Write for quantity price.

**Honey** This variety proved to be very desirable because of the large yield of grain, as well as enormous growth of forage.

It is given special recommendation in the Farm Bureau Monthly, and has proven highly satisfactory to all who grow it.

(Per lb. 25c) (10 lbs. \$2.00) postpaid. Write for quantity price.

**Early Amber** The Early Amber has been grown in California for more than thirty years and has always proven entirely satisfactory. It grows twelve feet tall when allowed to mature, but it stools to a wonderful extent when cut about every four weeks.

(Per lb. 25c) (10 lbs. \$2.00) postpaid. Write for quantity price.

**Texas Seeded Ribbon** Texas Seeded Ribbon Cane is one of the best crops that can be grown to use as ensilage on account of the enormous yield it makes per acre.

### READ

If you need forage for your horses, cattle or hogs, Sorghum planted about April 1st will furnish you the best feed in the shortest space of time. One-half acre will feed four head of stock all summer if only enough is cut each day for one day's need. In this way one can cut continuously all summer. As much as 40 tons may be cut from one acre.

Here are ten good reasons why a silo should be on every farm where dairy or other cattle are fed.

1. The silo preserves the palatability and succulence of green crops for winter feeding.
2. It conserves the entire crop.
3. The silo increases the live stock capacity of the farm.
4. Silage can be fed in summer when pastures are short.
5. Silage is relished by all kinds of stock.
6. It is digestible and aids in the digestion of other foods fed with it.
7. Silage reduces the cost of production of milk, beef and mutton.
8. It will increase the milk flow.
9. Silage promotes the health of the herd.
10. The silo provides an economical method for the storage of roughage.

The stems are succulent and sweet, as saccharine cane, not dry as non-saccharine cane, therefore it is as good as sorghum for dairy cows. Stock will eat every particle of it.

Our demonstration clearly indicates the Wonder Forage Plant will yield double the tonnage of any other sorghum. Five pounds of seed is sufficient to plant an acre.

Dairymen, each year that you delay planting this Wonder Forage Plant (Sudan Sorghum) you are missing something worth while for green forage. One acre of Wonder Forage is more valuable than three acres of Sudan Grass, both in quantity and quality. One acre is equal to two acres of sweet sorghum. The latter can be cut but once, the former twice with equal tonnage. (To do this will require good soil and ample irrigation, but it will do it). It has less sugar content than sweet sorghum, but must be classed as a saccharine. Do not waste another season by holding off. It is so much better than Sudan that there can be no comparison.

Stockmen, if you want a rich, green feed, sow the Wonder Forage.

(Per lb. 40c) (10 lbs. \$3.50) postpaid. Write for quantity price.

Mr. Holtzclaw of Tulare County advises us that he had never seen any crop to grow like the Wonder Forage. He grew 40 acres of it and his great trouble was where to store it all. It is excellent for feeding green or to cure for winter feed. He says also of the Silver Tip Sorghum—It beat any sorghum he ever grew before and he thought he knew all kinds of sorghums. The Silver Tip will grow more tonnage for the silo than any other variety.

## PLANT SORGHUM FOR THE SILO NON-SACCHARINE SORGHUM

### A & M Selected Dwarf Milo Maize

The King of all Sorghums for Grain. Is much preferred to the tall variety because it stools wonderfully and matures a large head of seed on each stool, producing 3500 pounds of grain per acre, and the stalk being shorter and having more foliage, makes it more desirable for fodder. Dairymen find that the cows will give more and richer milk when fed on it. It is the right crop to plant in young orchards because it will not shade the small trees.

A & M Dwarf Milo Maize is grown from selected stock. For many years the heads were carefully selected in the field before harvesting. Now we have a strain that grows about four feet high and produces forty per cent more than it did three years ago under the same climatic and soil conditions.

It is highly recommended by the State Department of Agriculture for silage. (Per lb. 25c) (10 lbs. \$2.00) postpaid. Write for quantity price.

**Egyptian Corn** Like the preceding fodder crops, it is grown chiefly for the foliage to pasture when young, but yields largely of grain. The chief merit of these fodder crops is in their hardness to produce fodder and grain with almost no rainfall or irrigation. Sow eight pounds per acre drilled. (Per lb. 25c) (10 lbs. \$2.00) postpaid. Write for quantity price.

**Higara** Similar in appearance to White Kafir but is more prolific; the grains are somewhat larger and are eaten more greedily by stock and poultry. It grows about six feet tall and stands upright. It is easily harvested and will yield four to six thousand pounds of grain per acre. It is very popular in Arizona and in the Imperial Valley. (Per lb. 25c) (10 lbs. \$2.00) postpaid.

**Feterita** Of the many non-saccharine sorghums offered in this book—none have proven more popular from the start than Feterita, on account of its astonishing growth after it becomes well rooted. Every testimonial received expresses astonishment at its rapid growth. Sow 12 pounds of seed per acre drilled two feet apart; by so doing it yields 5000 to 6000 pounds of grain per acre.

The grain has about the same feeding value as Egyptian Corn or Milo Maize; yields from two to three tons of grain per acre. The seed is more susceptible to cold than other sorghums, therefore should not be planted so early, nor should it be planted in cold soil.

The second growth stools wonderfully, producing several tons of excellent forage for pasture or for ensilage after the seed has been harvested. It thrives luxuriantly on soil so alkaline that field corn will not thrive. The heads are upright. (Per lb. 25c) (10 lbs. \$2.00) postpaid. Write for quantity price.

**Napier Joints** We offer for introductory purposes. (10 joints \$1.00) (25 joints \$2.00) (50 joints \$3.00) (100 joints \$5.00) Postpaid.

**Kikiyu Grass** Unequaled by any grass for a permanent pasture. (Sample quantity \$1.00) postpaid.

## Millet

Write for quantity prices on all varieties Culture same as for Sorghum. Sow from April 15th to Aug. 1st. Millets would be grown more extensively were it not for the destruction by birds.

Therefore in order to get best results it is important that you plant the variety best suited to your purpose.

**Broom Corn Millet** This variety is grown very extensively throughout the middle west. It yields enormously of grain for poultry and hogs. As you can see by the picture that it will grow several tons of hay per acre and produce two cuttings a season. It is a summer crop and requires very little moisture. (Per lb. 25c) (10 lbs. \$2.00) postpaid.

Mr. Munnich harvested from 7½ acres 7½ tons of seed and 6 tons of hay. The seed was heavier than the hay.

He says it matured within eight weeks. It requires very little moisture. It is a good summer crop to grow for hay when barley hay is scarce. It is the best crop to sow for a nurse crop for alfalfa when there is danger from drifting sands. There is no better summer crop to grow without irrigation whether for pasture or for hay.

Sow 20 pounds per acre.

**Russian, or Hog** If moisture is lacking and you need pasture in the shortest space of time, plant Red Russian or Hog Millet; there is a very slight difference, and both may be pastured within six weeks; both mature seed within sixty days. It grows three to four feet tall. This seed may be harvested by heading and a second crop will mature within another thirty days. We recommend it for a quick temporary pasture. (Per lb. 25c) (10 lbs. \$2.00) postpaid.

**Japanese** Grows rapidly four or five feet tall, branches freely with liberal foliage, matures seed within seventy-five days, seeds freely. We recommend it for early pasture or to cut repeatedly for hay. (Per lb. 25c) (10 lbs. \$2.00) postpaid.

**Golden or German** Grows three to four feet tall, branches freely and is enormously prolific of seed. The heads are covered with small bristles. Where birds can be controlled this is probably the best variety to grow for seed. Where moisture is scarce this is a very good variety to grow for pasture. (Per lb. 25c) (10 lbs. \$2.00) postpaid.

## SEED FOR BIRDS

**Rape** Thousands of sacks of rape seed are imported each year, while it grows wild in some localities of Southern California. It is a profitable and easy crop to grow and harvest. (Per lb. 25c) (10 lbs. \$2.00) postpaid. Write for quantity price.

**Canary** This can be grown quite successfully here. It is just as easily grown as barley, and requires the same cultural treatment. Several carloads are imported each year into Los Angeles. The consumption throughout the United States is enormous. All of this could be grown in California. (Per lb. 25c) (10 lbs. \$2.00) postpaid. Write for quantity price.

**Hemp** What has been said here of Canary is applicable also to Hemp. It is easily grown and requires about 100 days to mature a crop. It requires sixty pounds of seed to plant an acre, and should be sown in February. (Per lb. 25c) (10 lbs. \$2.00) postpaid. Write for quantity price.

**Mammoth Russian** Should be planted largely for seed or silage. It makes a good windbreak around your garden. It is a valuable plant that grows anywhere with little attention.

(Per lb. 25c) (10 lbs. \$2.00) postpaid. Write for quantity price.

## Mixed Seed for Canaries

**Our Bird Seed is Fresh** We buy it in car lots and mix it to proper proportions making a well balanced feed.

When you feed A & M bird seed you have no sick birds. (Per lb. 15c) (10 lbs. \$1.25) f. o. b. here. Write for quantity price.

**GUARANTEE**—Complaints that seeds are not of good germination might quite as often be attributed to other causes than the quality of seed. There are many contingencies arising to prevent the best seed giving satisfaction, such as plowing too deeply, too shallow, in too wet or too dry a soil, insects may destroy the plants as soon as or before they appear, wet weather, cold weather, frosts, chemical changes in the seed bed induced by temperature, etc. For many reasons it is impracticable to guarantee seed under all circumstances, therefore the Aggeler & Musser Seed Company give no warranty, expressed or implied as to description, quality, productiveness or any other matter of any seeds, bulbs, plants or trees they send out and they will not be responsible in any way for the crop.

## CORN AND SORGHUM TOGETHER

Two good feed crops at once are grown by Sherman Wood of Monterey county for one to follow the other. Sorghum is planted between the corn rows when the latter is 18 to 24 inches tall. After the corn is off, the sorghum makes fine pasture.

## A & M Field Corn

### CORN FOR GRAIN

We offer many sure and big yielders, but your selection should be governed by your local conditions. For dry farming, we recommend: King of the Earlies, Mexican June and King Philip.

For big yield where irrigation is available we recommend all of the varieties listed here, with special stress upon Reid's Yellow Dent for yellow corn and Orange County Prolific for white corn.

Do not overlook the fact that Orange County Prolific is a leader in yield of grain as well as silage.

All varieties listed below: (Per lb. 25c) (10 lbs. \$2.00) postpaid. Write for quantity price.

#### WHITE DENT

Hickory King	110 days
Iowa Silver Mine	110 days
Wisconsin White Dent	110 days

#### YELLOW DENT

Imperial Ensilage	100 days
King of the Earlies	90 days
King Philip Flint	90 days

## Eureka Ensilage (White Dent)

This variety is a favorite for the silo. But some objection has been expressed, that the stalks are too large to be handled conveniently. This would indicate that it had been grown on very rich soil. It is very stalky and stands up well. The tonnage of silage per acre will average well above 20 and may yield 30 tons. Any claim above this is based upon individual acreage. (Per lb. 25c) (10 lbs. \$2.00) postpaid. Write for quantity price.

**Imperial Ensilage** A yellow Dent Variety that produces very long ears of 12 rows. It is a rank grower and very satisfactory for the silo. (Per lb. 25c) (10 lbs. \$2.00) postpaid. Write for quantity price.

**Mexican June** The corn for the arid southwest. When the white man was a pioneer in Arizona and New Mexico, he tried to grow corn but failed. The country and climate were condemned; corn could not be grown, but thanks to the good work of the various state and federal experiment stations, we have the Mexican June. This has been bred up by years of selection from seed which has existed among the Indians from time antedating the Aztecs. Imperial Valley growers realized its merits ten years ago. In Arizona, New Mexico and Texas, it is now grown where no other variety will thrive. (Per lb. 25c) (10 lbs. \$2.00) postpaid. Write for quantity price.

## ORANGE COUNTY PROLIFIC

### THE MOST SATISFACTORY SILAGE CORN

Orange County Prolific was introduced by us in 1911. At that time we had stalks on exhibition with nine ears of commercial size and others that were smaller.

The season just past indicates, by numerous testimonials, that Orange County Prolific corn leads all other varieties both for corn or silage. From Arizona where the sacaton June Corn is considered the only corn for that state, we have a letter from Mr. Joyce saying—"The Orange County Prolific produced more and better corn than the June." Orange County Prolific will give you more and better silage than any other corn. It is the most satisfactory variety to grow for the silo.

We have a report that the Orange County Prolific planted July 25th produced 28 tons per acre. (Per lb. 20c) (10 lbs. \$2.00) postpaid. Write for quantity prices.

Dear Sir:—

"I would like to let you know that from your seed of Orange County Prolific, we cut 105 tons of ensilage from 3½ acres. Some of the stalks are as high as 18 feet."

NICHOLAS KNOPP, Calif.

## NORTHERN WONDER

This may properly be described as an improved strain of Orange County Prolific. Mr. M. E. Mead, a dairyman of Norwalk, grew a field of it last season and states that it attracted the admiration of all who saw it.

Mr. Thomas, dairyman of Compton, says it is the finest silage corn he ever grew.

It is quite sufficient for us to say that if it beats the Orange County Prolific, it must be very, very good, and we want our customers to have it.

It is very popular with the dairymen around Stockton. (Per lb. 25c) (10 lbs. \$2.25). Write for quantity price.

## Read This

Gentlemen:—

I want to thank you for your letter of May 24th. I have delayed writing until I could tell you the result of your advice in regard to the wire worm in the corn. I sprinkled lime about the young corn of one row without much benefit. Next I sprinkled it on the second row before it had sprouted with comparatively few cases of the worm. With the third row I dug the lime into the soil before planting and then sprinkled the surface. Result, only one solitary wire worm and the best row of corn I have had this season.

Yours truly,  
W. W. LOCKWOOD.

### BEST CROPS FOR SILAGE

Indian corn heads the list as recommended by the Dept. of Agriculture. The varieties that exceed in tonnage yield per acre are: Orange County Prolific, Eureka Ensilage, Mexican June (Sacaton) and Hickory King.

# Grain and Field Crops

When field seeds are desired by mail, add the required postage.  
See inside front cover page.  
Write for quantity prices on all grains.

With our up-to-date facilities for cleaning all kinds of seed, we aim to have all field seeds as clean and free from fowl seeds as it is possible to make them.

Grain and other field seeds that pass in the open market as clean will often show ten per cent or more of broken grain, fowl seeds, chaff and dirt. Should our prices appear higher than others, you will find upon investigation that they are cheaper, because of the purity of the seed.

Legal Weights—Pounds per Bushel			
Barley .....	48	Clover Seed .....	60
Beans .....	60	Millet .....	50
Corn .....	56	Oats .....	32
		Wheat .....	60

Write the Department of Agriculture, Washington, D. C. Ask for Farmer's Bulletin 939. Subject: "Cereal Smuts and the Disinfection of Seed Grain."

## BARLEY

Sow 50 to 60 Pounds per acre.

We aim always to have the best it is possible to procure. We cannot fix a price because of the fluctuations of the market. Bearded Barley, Beardless Barley and Bald Barley. Write for prices.

### TRY THIS

One rancher whose name we cannot recall, told us that he sows his barley early and cuts it three times for hay; each time before the heads appear, and then allows it to head out for grain. Try it.

## OATS

Sow 70 to 100 Pounds per Acre

**Texas Red** (Rust Proof)—This is the only variety that is profitable to plant here. We have this on hand during the planting season.

Texas Red Oats—Grown in Texas.

Texas Red Oats—Grown in California. Write for prices.

## WHEAT

Sow 50 Pounds per acre.

**Defiance** One big drawback against growing wheat in California has been rust, but this has been largely overcome by planting the Defiance variety where cool, moist weather conditions prevail. This variety is practically rust-proof.

Defiance is a late wheat and should be planted early and seeded thin. It is non-shattering and classed as a hard white wheat, and number one for milling.

**Sonora** This variety is recommended because of its large yield, earliness and growth resistance. It is susceptible to rust and inclined to shatter, but it has long been a standard variety in Southern California back from the coast. It is classed as a soft white wheat.

**Early Baart** Early Baart Wheat is the right variety for the interior valleys. Favorable reports have come from San Joaquin and Imperial indicating that this variety will yield 20 sacks per acre under dry conditions that would impair other crops.

More acreage will be planted to this variety because it is no longer an experiment; it has demonstrated that it will out-yield other varieties for dry farming.

## Dwarf Essex Rape

Pasture for Hogs, Sheep and Poultry

There is a need and a place for an extra quick growing green forage crop for use any time during fall, winter and spring, and our Dwarf Essex Rape fills the need exactly.

Rape can never become a pest as it belongs to the same general family as the turnip and rutabaga, and when planted under favorable conditions of soil and season, it makes an immense crop of green forage, juicy and succulent, and often at a time of year when little green feed is available.

(Per lb. 30c) (10 lbs. \$2.50) postpaid. Write for quantity price.

**Russian Flax** Will undoubtedly grow as luxuriantly in the Imperial and San Joaquin Valleys as it does in San Luis Obispo County, where it is at its best, and yields about two tons of seed per acre. Sow 40 pounds of seed per acre. It requires the same culture as barley.

(Per lb. 30c) (10 lbs. \$2.50) postpaid. Write for quantity price.

## Barley as a Winter Pasture

Several other plants furnish good winter pasture, but none are so valuable as Barley. It affords grazing earlier, and more abundantly. It recovers more rapidly after being grazed down. It is more relished by stock and more wholesome. It stands up so that stock can eat it with less dirt or other objectionable matter, and it is never affected by rust.

Sown in September it affords good grazing until May, but if the stock are taken off in March, a good crop of grain can be harvested.

For this purpose sow 100 pounds per acre and irrigate if needed.

Barley sown in an alfalfa field during October will make good pasture during the winter when alfalfa is dormant, or it may be grown for hay without injury to the alfalfa.

## RICE

If interested write to U. S. Department of Agriculture, Washington, D. C., for Farmer's Bulletin No. 688, and Circular No. 97.

The variety now accepted as the best for California, is the Wataribune, an early variety imported from Japan.

(Per lb. 25c) (10 lbs. \$2.00) postpaid.

Rice is now grown in such widely distributed territory throughout California that it is evident we have the climate and it is only a matter of local condition. Therefore, if you have clay hard-pan soil with duck-ponds and tule, just grade it so it can be flooded, and sow rice. Apparently the more alkali the better.

To grow rice successfully necessitates a pond or reservoir that the water may attain a higher temperature than is usual for fresh water, when applied to the rice field.

## RYE

Sow 60 Pounds per Acre.

Although Rye is sown largely for early winter pastures, green manuring and a limited acreage for the straw, it should be grown more largely for the grain, which is now in great demand. Write for prices.

**Winter Rye** Write for prices.

## BROOM CORN

Grow more Broom Corn, but first make a contract with one of the factories to buy your crop. Unless you are familiar with growing it, first try a small acreage. Ask for our circular on Broom Corn.

**Dwarf Evergreen** This is the standard because it is easily harvested and in quality there is none better. It is the best to plant throughout the Southwest. (Per lb. 25c) (10 lbs. \$2.50) postpaid. Write for quantity price.

## BUCKWHEAT

**Common** The soil is always moist where shaded with April 1st, about 45 pounds per acre. Sow the seed any time after it will have matured. It will not survive the winter. Therefore it is necessary to sow once a year.

We highly recommend the growing of Buckwheat for reclaiming desert land, as it will start a growth and produce a crop under more adverse conditions than any other crop we know of.

(Per lb. 25c) (10 lbs. \$2.00) postpaid. Quantity price on application.

## COTTON

**Pure Pedigreed Seed** All the seed we offer will have the approval of the proper horticultural inspectors. Therefore, you need not hesitate to order our seed. Write us stating what variety you want. We will then quote the price giving a pedigree of the seed offered, and the place where it was grown.

We offer the following varieties: Durango, Pima, Acala. Write for price.

## TOBACCO

Grow your own smoking tobacco

Poultrymen, grow tobacco for your hen houses

If interested consult us about the culture. One ounce of seed is sufficient to plant an acre.

**Pennsylvania Broad-leaf** The largest known variety. At our demonstration plot we grew leaves that measured 40 inches long, 28 inches wide. In Pennsylvania this variety developed leaves 44 inches long and 36 inches wide. It is the best variety to grow in the home garden for use in the chicken house or other insecticide purpose. Also if handled properly makes a good smoking tobacco for the pipe. (Pkt. 10c) (oz. 50c)

**Acclimated Havana** For quality this is the very best. (Pkt. 10c) (oz. 50c)

## Tobacco Culture in California

It is true we can grow tobacco just as luxuriantly in California as elsewhere. It has been repeatedly tried in various sections of the state but at no place did the experiment extend to the third year. California cannot cure a fine grade of tobacco. The cause may be our lack of rain to wash off the gum or it may be the dry atmosphere, or our lack of frost.

However, a fairly good smoking tobacco is made by carefully drying the leaves in a shed.

## Read

The most dangerous offenders of the pure seed laws are irresponsible growers who gather seed from surplus crops regardless of any conditions surrounding the growth, and have no facilities for cleaning, and will offer the seed by the wayside to anyone who will purchase it.

Mr. Planter, we advise that you get a strong microscope and with it examine any seed before you buy. You will then not hesitate to pay the higher price for clean seed. When you go to the store for your seed, ask for A & M Reliable Seeds; they are pure and clean.

It is important that growers give attention to the description in this catalog in order that they will plant the grain best suited to their locality with regards to soil and climatic conditions.

# FERTILIZERS

WRITE FOR QUANTITY PRICE

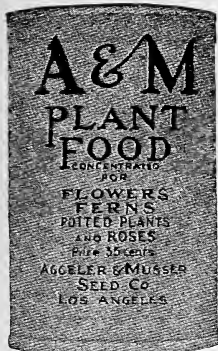
## A & M PLANT FOOD

For Flowers, Ferns, Potted Plants and Roses

This concentrated plant food should be used by all who grow plants of any kind in pots, such as Ferns, hanging baskets, also for roses and in window boxes.

You have, no doubt, often noticed pale and sickly looking foliage on your plants. A & M Plant Food will restore the color and promote the growth.

It is packed in a convenient, sealed 2-pound package. Will not deteriorate after being opened and, very important, it can be kept in the house without discomfort. If covered, there will be no disagreeable odor. Per package, 35 cents, f. o. b. Los Angeles.



## A & M LAWN AND GARDEN FERTILIZER

Quick and Lasting Results

A & M Lawn and Garden Fertilizer is a scientifically prepared chemical compound carrying the necessary elements for the promotion of plant growth.

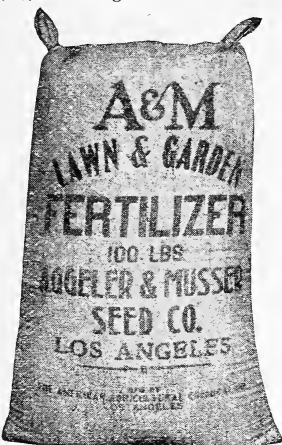
It not only enhances the beauty of the blossom and the color of the lawn, but it is a wonderful stimulant to vegetable life, and, in addition to its many uses in the garden, it can be applied with wonderful results in the field for vegetables and other crops.

This fertilizer is easy to apply and it is in powder form and quickly available.

For the convenience of our customers we have it packed in 25-pound, 50 pound and 100-pound bags, priced as follows:

25 pounds	.....	\$1.10
50 pounds	.....	2.00
100 pounds	.....	3.75

F. O. B. Los Angeles



## SULPHUR

For All Purposes to Increase Crop Yields

Experiments conducted during the past few years by noted soil chemists and practical cultivators have revealed that sulphur:

1. Is readily utilized by plants as stimulating food.

2. It improves alkali soils by neutralizing the alkali which rises to the surface or which is carried in by the irrigation water.

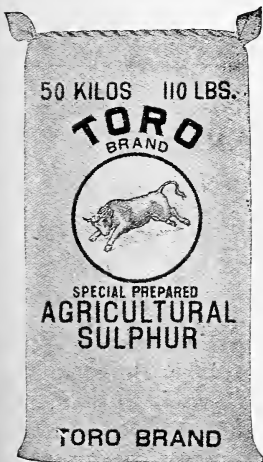
3. Promotes nitrification: Dr. F. C. Reimer, in Oregon Agricultural Bulletin No. 163 says, "The various sulphur fertilizers have a very stimulative effect on the root system, increasing its size and the number of nodules. This is of great value in taking up larger quantities of plant food, moisture and atmospheric nitrogen."

4. Transforms latent potash and phosphates into available plant food.

5. Increases protein and feeding value of crops.

6. Destroys the spores of fungi and the larvae of injurious insects in the soil. Prevents Potato Scab, Wire Worms, Eel Worms or Nematodes, etc.

per acre of "Toro Brand" specially prepared agricultural sulphur.



Drill into the soil two sacks per acre of "Toro Brand" specially prepared agricultural sulphur.

**Time to Apply** "TORO BRAND" should be worked into the soil in late fall and early spring in order to get the benefit of winter and early spring rains. However, in the irrigated districts it may be applied at any time of the year.

Price per sack of 110 lbs.: 1 sack lot, \$4.10; 5 sack lot, \$4.00; 10 sack lot \$3.90; f. o. b. Los Angeles.

## Fertilizers in Small Gardens

Amateur garden makers are often puzzled as to the amount of fertilizer needed for their small plots, because the usual directions give only the amount per acre. The following table shows (approximately) the proper proportions:

100 lbs. per acre equals 1 lb. for a plot 10x43 feet.
200 lbs. per acre equals 1 lb. for a plot 10x21 feet.
300 lbs. per acre equals 1 lb. for a plot 10x14 feet.
400 lbs. per acre equals 1 lb. for a plot 10x11 feet.
500 lbs. per acre equals 1 lb. for a plot 10x 9 feet.

## Agricultural Hydrated Lime

It supplies the element calcium to plants; it makes "sour soil sweet," changes an acid condition to a slightly alkaline one; it has the power to shrink clay and adobe soils, making a larger number of crumbs from a sticky mass; it prevents packing, baking and cracking, makes cultivating easier; it promotes the normal decay of organic matter in the soil, preventing the accumulation of poisonous matter; it promotes the change of nitrogen in organic matter into available nitrates, liberates and places at the disposal of plants potash and phosphoric acid already in the soil. It destroys fungus and the germs of insect life that infest the soil. Hydrated Lime, because of its fineness, high calcium contents concentrated condition, is the ideal agricultural lime and the most economical on the market. Use one-half less than other forms of lime. In cloth sacks weighing approximately 80 pounds (4-lb. carton 25c) (Per sack \$1.50) Write for prices in ton and carload lots.

**Super-Phosphate** (25 lbs. 65c) (50 lbs. \$1.20) (100 lbs. \$2.25). Write for quantity price.

**Fish Fertilizer** This fertilizer is composed of dried fish, finely ground, and is purely organic. An excellent fertilizer for all crops. Will last for several crops without the need of other fertilizer. Write for prices.

**Dried Blood Meal** Is very rich in nitrogen and an excellent plant-food for increasing the yield of vegetables and fruit, and also for stimulating the growth of flowers. There is from 12 to 13% nitrogen. Write for price.

**Bone Meal** 3¼% nitrogen and 16% phosphoric acid. Neither of these two elements are immediate in their action. If put in the soil in the Fall, some results will show the following Spring. Slow but sure. Write for price.

**Nitrate of Soda** Contains about 15% nitrogen. Is very quick in action and entirely soluble. Is best applied after the plants are growing. Price fluctuates. Write for prices.

**Leaf Mould** Excellent for mixing with soil for potted house-plants, especially ferns of all kinds. (Per sack \$1.25) f. o. b. Los Angeles.

**Gypsum** This is not a fertilizer, yet it has an indirect fertilizing value, which is mainly due to the fact that it has the power of changing unavailable forms of plant-food, especially potash, into available forms. A heavy dressing of Gypsum will greatly improve any heavy soil, rendering it lighter and more easily cultivated, and relieve the tendency to crust and bake. If your soil contains alkali or is sour, use Gypsum. (Per 100 lbs. \$1.25). Write for quantity prices.

**Sheep Manure** For lawns, gardens, window boxes, potted plants and flower beds. (Per 10 lbs. 50c) (50 lbs. \$1.10) (100 lbs. \$2.00) f. o. b. Los Angeles.

## AMMONIUM SULPHATE

### A Nitrogen Fertilizer

Ammonium Sulphate is a natural by-product of Coke Ovens. It has been known as a high grade carrier of Nitrogen for about fifty years.

Some idea as to the value of Ammonium Sulphate as a nitrogen carrier may be obtained by the fact that to equal 100% of Ammonium Sulphate in nitrogen content, it would take: 100 pounds Nitrate of Soda or 290 pounds Cotton Seed Meal or 1,650 pounds of ordinary fertilizer or 4,000 pounds of good stable manure.

For Garden use rake the soil 1 pound to every 150 square feet. One pound is sufficient for any 1 year old tree or 1½ pound for a 2 year old tree. For field crops apply 100 pounds per acre. (25 lbs. \$1.75) (50 lbs. \$3.00) (100 lbs. \$5.75).

"Hints to Potato Growers," published by the Potato Growers Association of New Jersey, July issue, reporting the checking up of various fields where Sulphur was used, reads, viz:

## Sulphur Gives Good Results

The field in which this work was conducted grew very scabby potatoes last year. Sulphur was applied this spring at the rate of 300 and 600 pounds per acre. Enough of each plot was dug to show that the sulphur applications had given very good control of scab. On the rows receiving no sulphur only 20 per cent of the crop was clean as compared with 80 per cent on the rows where the sulphur was applied.

On rows receiving no sulphur a large per cent of the crop was severely scabbed while on adjoining rows treated with 500 pounds of sulphur there were very few scabby tubers.

# All Year Treatment Against Insects and Disease

## Enemies of Garden and Grove

For prices and list of insecticides refer to insecticide page. Your particular attention is directed to Nico Dust Preparations and Sherwin Williams Insecticides for the control of garden and orchard pests. These preparations are used extensively by experienced growers and are highly satisfactory.

### ROSES

**Rose Aphis** In spring and summer spray with solution of fish oil soap and water, or one part Kils-All to twenty parts of water.

**Rose Scale and Fungus** Spray with solution one part Spra Mulsion to ten parts water.

**Thrip** Spray with one part Kils-All to twenty parts water.

**Mildew** Spray with Fungi-Bordo. Follow directions on package.

### HOUSE PLANTS

**Fertilizing** Apply a teaspoonful of A & M Plant Food once a week. Do not allow the plant to stand in water. Give it plenty of fresh air and sunshine.

**Fern Scale** Spray with Kils-All. The best time is during the cool of the evening. Do not set the plant in the sun immediately after spraying.

### VEGETABLES

**Asparagus Rust** Spray with Dry Lime Sulphur or Fungi Bordo. Use according to directions on package.

**Scant Foliage** Indication that soil is worn out. Apply A & M Lawn and Garden Fertilizer.

**Green Worm** On cabbage and cauliflower. Dust with Hammond's Slug Shot.

**Cut Worms** Mix 1 lb. Paris Green in 10 lbs. of bran. Add one quart black strap molasses and two lemons chopped fine. Mix the whole to a crumbly mass and scatter in the field.

**Grass Hoppers** Same as for cut worms.

**Mildew on Peas** Spray with Fungi Bordo. Follow directions on the package.

**Potato Diseases** For scab and other fungi on potatoes, dip the tubers in a solution of one pint formaldehyde and 25 gallons of water allowing them to soak two hours. See potato page 42.

**Tuber Moth and Blight** Moths enter the soil thru cracks. Keep the potatoes well hilled and spray with Tuber Tonic.

**Tomato Worms** Pick off by hand or before fruit is half grown. Spray with Arsenate of Lead solution three to four level tablespoonfuls to one gallon of water.

**Tomato Blight** Spray with Fungi Bordo, using according to directions on the package.

**Slugs** Spray with Kils-All or dust with Hammond's Slug Shot.

**Melon Blight** Spray the hill freely with Fungi Bordo so that the liquid will follow the stem several inches below the surface. This should be done as a precaution as well as for a remedy.

**Nematode** Plant the infected land to Barley or Grass for three seasons. Sir the soil deeply and keep free from weeds. Apply Toro Sulphur two sacks per acre or 1 pound per 100 square feet.

**Cucumber Beetle** Spray with S. W. Dry Arsenate of Lead or dust with Nico Dust.

**Onion Thrip** Spray with Kils-All. Follow direction on package.

**Melon Aphid** Dust with Nico Dust. Full information on insecticide page.

Your 1921 book was so full of useful information that I can not get along without another.

Every farmer can learn something of value by carefully following your advice.

H. H. CONNOR, Calif.

### CITRUS TREES

**The Scales** For black, red, yellow, purple, greedy and soft scale spray with Kils-All or Spra-Mul-Lime Sulphur 3-4 lbs., water 10 gallons.

**Mealy Bug** Use Kils-All according to direction on the package.

**Red Spider** Dust with Nico Dust. Full information on insecticide page.

**Aphis** Dust with Nico Dust. Full information on insecticide page.

**Gum Disease and Scaly Bark** Apply Fungi Bordo to the lower branches, trunk and surface roots at base of tree.

### DECIDUOUS TREES

**San Jose Scale** Also Leaf Blister Mite, Peach Leaf Curl and Red Spider. Spray dormant trees with solution of ten tablespoonfuls of Dry Lime Sulphur to one gallon of water. For summer spraying use 3 tablespoonfuls to one gallon of water.

**Pear Blight** Cut out every appearance of the disease on twigs, branches or trunk well down into healthy wood. Disinfect the shears after each cut.

**Woolly Aphis** Also Black Peach Aphis, spray with solution 1 oz. Black Leaf 40, 1½ lbs. Fish Oil Soap to seven gallons of water. Soak the same solution into soil over the roots.

**Peach Borer** Dig the borer out with a sharp pointed knife and cut the tree back heavily.

**Codling Moth** After first bloom has fallen and before the calyx cups are closed spray with solution of one pound S. W. Arsenate of Lead to one gallon of water.

**Climbing Insects** To prevent ants and other insects from entering trees, apply Tree Tanglefoot.

### MISCELLANEOUS

**Ants** Apply Buhach Powder in the hill for large red ants and along the run of the small house ant. Buhach powder is non-poisonous and may be used in the house to eliminate ant troubles.

**Mealy Bug** This insect may appear in vegetables, shrubs or trees. Use Kils-All.

**Snails** Spray with Kils-All or dust with Slug Shot.

**Flies** For flies on cattle or horses spray the animal with Dr. Hess' Fly Chaser.

**Chicken Lice** Dr. Hess' Instant Louse Killer.

**Gophers** Use Gopher-Scent. They like it and it does the work.

**Ground Squirrels** Gas Balls are more effective than any remedy we know of.

**Moles** Rittenhouse Mole Trap.

## WHY NOT SELECT A CHRISTMAS PRESENT

From this Book

Surely there is something listed here that would prove to be a practical and desirable present for your friend.

Let Us Offer Some Suggestions

A Bird, Gold Fish, Flowering Bulbs, an Assortment of Seeds, Garden Hose, Lawn Mower, a Garden Tool, a Planter, Sprayer, or Duster, an Incubator or Brooder.

Look over these pages—you may find the proper present.

# Sherwin-Williams Insecticides

Will Insure You Better  
Fruits and Vegetables

NO POISON MAY BE SENT BY MAIL!

## Sherwin-Williams Insecticides

Will insure you  
better fruits and  
vegetables.

**Notice** Poisonous insecticides cannot be sent by mail. Many insecticides are not dangerously poisonous. Some are in liquid form, put up in tins or glass; to send these by mail, extraordinary care must be given to the packing, which necessarily adds much to the weight and therefore to the postage which may seem out of proportion to the purchase price.

On bulky items where the postpaid price is not mentioned, we prefer to send by express, and shall do so unless requested to do otherwise.

### Read This

If wanted by parcel post, add sufficient money to cover postage. Estimate liquids plus package at the rate of 4 pounds to the quart, or 14 pounds to the gallon. See parcel post rate on inside of front cover page.

Prices fluctuate and are subject to market changes.

## Sherwin Williams Dry Powdered Arsenate of Lead

Because of its unusual lightness, stays thoroughly in suspension during spraying operations, thus giving the spray uniform strength. May be used as a wet spray or dusting. For the control of Codling Moth, Cabbage Worms, and all leaf eating and chewing insects.

**Directions:** One to one and one-half pounds to fifty gallons of water. Or three or four level tablespoonfuls to one gallon of water. For dusting use with five or six parts powdered Lime. (½ lb. 30c) (1 lb. 70c) (5 lbs. \$1.75.) Cannot be sent by mail.

## Sherwin Williams Fungi-Bordo (Bordeaux Mixture)

In powdered form, mixes perfectly with cold water. For peach, tomato and potato blight all fungus diseases.

**Directions:** Use seven to nine pounds to fifty gallons of water. Or seven to eight tablespoonfuls to one gallon of water. (1 lb. 35c) (5 lbs. \$1.50) (25 lbs. \$5.00). Write for quantity price. Cannot be sent by mail.

## Sherwin Williams Dry Lime-Sulphur

The use of Lime-Sulphur solution is known to practically every fruit grower in the country. Sherwin-Williams Dry Lime-Sulphur is standard Lime-Sulphur solution in dry powdered form—the first and only one of its kind in the market. It has all the advantages of the liquid material, but eliminates the disadvantage of heavy freight charges, loss from evaporation and leakage; also the inconvenience of handling a heavy and bulky barrel. Its effectiveness has been proven by a number of years of use by large fruit growers and practically all Experimental Stations.

It will control San Jose Scale, Leaf Blister Mite, Peach Leaf Curl and Red Spider.

**Directions for use** is spraying dormant trees. Use from ten to fourteen pounds to fifty gallons of water for eight to ten tablespoonfuls to one gallon of water. For summer spraying against fungus diseases on all stone fruit, use two and one-half to three pounds to fifty gallons of water. (1 lb. 25c) (5 lbs. \$1.00) (10 lb. pkg. \$1.70) f. o. b. Los Angeles. Write for quantity price. May be sent by mail.

## Sherwin Williams Paris Green

has by years of use proven its quality. It has become the standard Paris Green everywhere. It is light and fluffy, insuring good suspension in the spray tank and thorough covering of the foliage; contains approximately 56% arsenious oxide and less water soluble arsenic than is allowed by law. It is one of the safest and most effective Paris Greens on the market today.

**Directions for use:** Four to six ounces to fifty gallons of water. Or two teaspoonfuls to one gallon of water. For cut worms and grasshoppers add one tablespoonful of Paris Green to ten pounds of bran and spread about the base of the plants. It is always well to add ¼ lb. Paris Green to each barrel of Bordeaux when spraying tomatoes. (¼ lb. pkgs. 20c) (½ lb. 40c) (1 lb. 65c) Write for quantity price. Cannot be sent by mail.

## Sherwin Williams Pruning Compound

Will aid nature in healing wounds without retarding the growth. Has special disinfectant qualities. The compound is ready for use. Cover all cuts at once; use stiff brush or cloth to apply. (1 qt. 75c) (1 gal. \$2.25) May be sent by mail.

For Aphides and All Sucking Insects Use

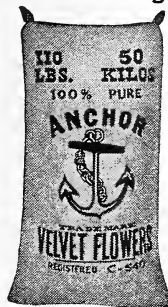
## "BLACK LEAF 40"

### Nicotine Sulphate—40% Nicotine

1 oz. 35c—makes 6 gals. spray.  
½ lb. tin—\$1.25—makes 40 to 120 gals. spray.  
2 lb. tin—\$3.50—makes 160 to 500 gals. spray.  
10 lb. tin—\$13.50—makes 800 to 2,500 gals. spray.

## SULPHUR

For Dry Dusting of Trees, Vines, Etc.,  
Bleaching Fruit, Etc.—Anchor Brand



It has been proven and so recommended by the University of California that if you sulphur your grape vines and orchards six times they will not be affected by Mildew or Red Spiders and rust.

Anchor Brand Velvet Flowers of Sulphur, packed in double sacks, is the fluffiest and purest sulphur that money can buy; the best for vineyards; the best for bleaching purposes, leaving no ash.

Try our new brand ventilated Sublimed Sulphur—Impalpable powder, 100% pure, in double sacks, for dry dusting and making paste Sulphur.

(Per 110 lb. sack \$5.40) (5 sack lots \$5.35 per sack) f. o. b. Los Angeles.

Write for quantity prices.

## Diamond S Brand

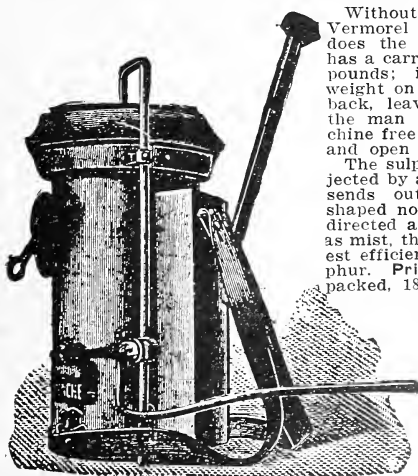
### For Lime-Sulphur Solution

For Lime-Sulphur Solution, use our Diamond "S" Brand Refined Flour Sulphur. We can furnish you this sulphur at such a low price that it would pay you to mix your own solution and net you a profit equal to the amount paid out for labor in spraying your orchard, even if you pay your men \$4 per day for making the solution and applying the same.

Send for circulars No. 6, No. 7 and No. 8, for information from prominent growers and horticultural commissioners; and booklet "The Truth About Sublimed Sulphur." (Per 110 lb. sack \$3.80) (5 sacks \$3.75 per sack.)

Toro Brand (See Fertilizer).

## THE VERMOREL "TORPILLE" SULPHURING MACHINE



Without any doubt the Vermorel Sulphur Duster does the work perfectly. It has a carrying capacity of 15 pounds; it distributes the weight on the shoulders and back, leaving the hands of the man operating the machine free to work the pump and open up the vines.

The sulphur, violently projected by a powerful bellows, sends out of the paddle-shaped nozzle, which can be directed at will, dust as fine as mist, thus producing highest efficiency with least sulphur. Price \$18.00. Weight packed, 18 lbs.

The Vermorel  
"Torpille"  
Sulphuring  
Machine

## INSECTICIDES—Continued

**Rosin Spray** Effective for black, red, yellow, purple and citricola scale, mealy bugs, wooly aphids, black peach aphids and plant lice. Recommended by the Horticultural Commission. Dissolve 1 lb. of the spray in 2½ gallons of either hot or cold water and thoroughly mix before spraying it on trees or plants. (1 lb. can 35c) (2 lbs. 60c) (3½ lb. can 90c) (40 lb. can \$6.00) f. o. b. here.

**Tobacco Dust** For aphids and small insects in plant beds and poultry houses. (lb. 20c) (10 lbs. \$1.50) Cannot be sent by mail.

**Tobacco Stems** For fumigating green-houses and chicken nests. (10 lbs. 75c) (by mail 20c per lb.) Write for quantity price.

**Tree Tanglefoot** (Paste). This is a sticky substance applied to the bark of trees to protect them from all climbing insects and also rabbits. It will prevent ants from entering the trees. One application is good for three or four months. (lb. cans 60c) (3 lb. \$1.50) (5 lb. \$2.75) postpaid.

**Whale Oil Soap** (Fish Oil). This is not only an excellent insecticide for killing plant lice and fungus growth, but should be mixed with most all liquid sprays as it causes the spray to adhere much better to the leaves. (1 lb. 25c) (5 gal. \$1.00) (40 lbs. \$8.50) May be mailed.

**Blue Stone** (Sulphate of Copper). Applied in time it will prevent mildew and all fungus diseases. Also prevents smut on barley and wheat, by soaking seed to be planted in a solution of 1 lb. to 6 gallons of water for ten or fifteen minutes. (Per lb. 15c) (25 lbs. \$3.00 f. o. b. here.) May be sent by parcel post.

**Carbolic Acid, Crude** (1 qt. cans 60c) Cannot be sent by mail.

**Carbon Bi-Sulphide** (Liquid) For exterminating go-phers, squirrels, ants or any vermin that live under the ground. Saturate cotton or other absorbent, put deep in hole and close all openings. For ants, pour into the openings. For weevil in grain, put grain in air-tight chamber; for 100 cubic feet of space use ½ pint Carbon Bi-Sulphide, saturate it into any absorbent so that it will evaporate quickly; close the chamber tightly for three or four hours. It is not necessary to remove the grain from the sacks. **Notice:** It is very combustible. Do not smoke or have fire near while handling. (Pint 40c) (Quart 60c) (1 gal. \$2.25) Cannot be sent by mail.

**Formaldehyde** (Liquid). For destroying the germs of smut on grain, scab and rhizotonia on potatoes. Dilute one pint in forty gallons of water, submerge potatoes one and one-half hours and grain only long enough to moisten it. (½ pint 45c) (1 pint 75c) (1 qt. \$1.50) Cannot be sent by mail.

**Hammond's Slug-Shot** (Powder). Destroys bugs, insects and worms on melons, lima beans, cucumbers and tender plants. Also for use on asters, roses and flowering plants. Easily distributed by duster or in water by spraying 1 lb. to 10 gallons of water. Not injurious to persons or animals. May be sent by mail. (lb. 40c) (5 lbs. \$1.25) postpaid.

**Kills-All** Is a new insecticide which has been thoroughly tested for several years and by thorough experiments we have found it to be the best remedy we have ever tried for Mealy Bug, Thrip, White Fly, Wooly Aphid, Red Spider, Soft Shell Scale and Black Aphid. It may be used on the most tender greenhouse plants, according to directions, without burning the foliage. (½ lb. cans 50c) (1 lb. cans 85c) (5 lb. cans \$3.00) (40 lb. cans \$20.00 f. o. b. here) May be sent by mail.

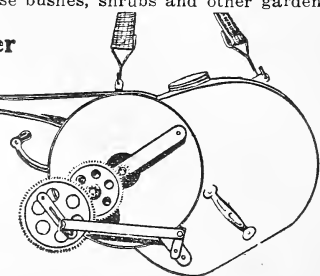
### The Cowdrey Duster



The Cowdrey Duster  
An inexpensive and practical general purpose GARDEN DUSTER for spraying all dry powder chemicals such as lime, sulphur, and nico-dust on rose bushes, shrubs and other garden plants. Price \$1.50.

### Springfield Duster

A most successful sprayer for the distribution of arsenate of lead, calcium arsenate, Paris Green, Bordeaux Mixture, and other insecticides and fungicides in dry form. Price \$7.50 f. o. b. here. Write for circular.



## NICO DUST INSECTICIDES

The American Vegetable Growers Association during one of their deliberations concerning insecticides have concluded that dusting is more effective, more easily applied and more economical than liquid spraying. That is about the best authority to be had. Nico Dust is the best thing in that line that has yet been prepared and it has proven satisfactory.

These preparations are in the form of a dry powder or dust, which is applied with a blower, thus affording a material saving in time, labor and expense. The discomforts as compared with liquid spraying are practically none.

"NICO DUSTS" are carefully prepared and have made possible the control of a large number of insects which have heretofore been difficult to eradicate.

Various pests require various strength of "Nico Dusts" to effect the proper killing, and each mixture is prepared from proven formulae which is the result of several years of research work. We are prepared to supply large quantities on short notice and our stock is always fresh.

CANNOT BE MAILED

### Nico Dust No. 5

Is made especially to exterminate peach aphid, pear aphid, prune, onion, and orange thrip and similar insects. (5 lbs. \$1.50) (25 lbs. \$5.00) (100 lbs. \$16.00 f. o. b. here.)

### Nico Dust No. 6

A very strong mixture made especially for cantaloupe aphids. Large quantities of No. 6 are used successfully in the Imperial Valley and other melon growing districts. (5 lbs. \$1.65) (25 lbs. \$5.35) (100 lbs. \$18.75 f. o. b. here.)

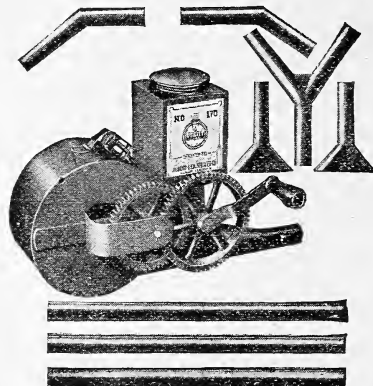
### Nico Dust No. 10

Especially prepared for aphid, garden beetle, cucumber beetle, cabbage worm and other similar insects which are difficult to eradicate. (5 lbs. \$2.00) (25 lbs. \$7.75) (100 lbs. \$27.00 f. o. b. here.)

### Nico Garden Dust

Prepared for the home garden where fruit trees, roses, sweet peas and general garden truck are grown. For the control of insects, mildew, leaf cutting insects and other pests commonly found in the garden. (8 oz. carton 40c) (2 lb. pkg. \$1.00) (5 lbs. \$2.00)

### Utility Duster No. 170



Used for the application, in dry form, or spray chemicals, as Arsenate of Lead, Paris Green, etc. Made of heavy tin, enameled red; iron and brass machine cut gears used throughout, and so arranged as to give a steady and uniform delivery. Fan is 3¼ by 6½ inches, larger than on other dusters of similar construction. The hopper holds more than a quart. The position of feed valve in bottom of supply hopper is shown by indicator on fan box.

The duster exclusive of the tubes is 14 inches long, 6 inches wide and 9½ inches high; it weighs with complete equipment about 6 pounds. It is provided with three 1-inch by 14 inch tubes, two 45-degree and one Y, or two-way connection and two large nozzles with wide spread, and an adjustable carrying strap. All points in the pipe line lock securely, no loose joints as on other makes of dusters.

Shipping weight, 8 pounds. Price \$7.50 f. o. b. here.

### Nico Garden Duster



This is a medium-sized duster for use in the home garden. It is very effective in applying Nico Garden Dust in places that are difficult to reach with any other duster. If you have any dusting at all to do this little gun will please you. (Each \$1.00) f. o. b. Los Angeles.

### Jumbo Powder Blower



To eradicate fleas, bedbugs, etc., use this blower. Also excellent for dusting house plants. By mail 50c.

Many insects and diseases can be destroyed more conveniently with a powder. For that purpose we have a complete line of dusters to suit your particular convenience.

## SPRAYERS FOR EVERY PURPOSE

### A & M Superior Utility Sprayer

This sprayer is made of heavy galvanized iron or brass, all seams sweated and riveted, tested at 95 lbs.; tank equipped with standard hose connections, capacity  $3\frac{1}{2}$  gallons. The pump cylinder is made of heavy brass tubing, with bronze ball check valve contained within a thin brass cage, which does not deteriorate like rubber. The nozzle is made of brass and can be adjusted to be operated at any desired distance by three-eighth inch connecting rod. This sprayer is especially adapted for spraying trees, poultry houses, out-buildings, barns, and vegetables of all kinds. By reason of the ball bearing check valve, any insecticide or acid may be used safely in this pump without danger to the valve. This pump is the dairymen's friend. Packed, one in a box, shipping weight 10 lbs. Price: galvanized, \$8.00; brass \$11.50 f. o. b. Los Angeles.



Utility Sprayer

### Utility No. 40 Portable Outfit

Very useful for painting, whitewashing, and disinfecting warehouses, factories, barns, trees and greenhouses.

TANK larger than most similar outfits, made of heavy galvanized iron. A fine strainer at suction end prevents sediment getting into working parts of pump.

FRAME substantially built of steel, well braced and balanced.

Equipment:—Capacity 18 gallons; 10 feet  $\frac{1}{2}$  inch 5-ply spray hose, 4-foot spray rod; 1 patented Utility Angle Nozzle No. 65. Shipping weight complete, crated 85 pounds.

No. 40—Portable Outfit. Price, each \$35.00 f. o. b. Los Angeles.

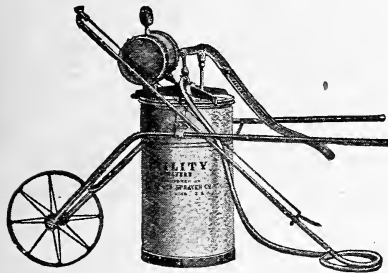
### Utility No. 40A Portable Outfit

Same in construction as our No. 40, but equipped with an air pressure tank mounted on pump casting. This makes a one-man outfit. By obtaining 250 lbs. pressure considerable spraying can be done without pumping.

Equipment same as with No. 40.

Shipping weight, complete, crated, 100 pounds.

No. 40A—Portable Outfit, Price each, \$45.00 f. o. b. Los Angeles.



### Perfection Compressed Air Pump

The tanks are made of heavier metal than has ever been used in sprayers of this kind, making the tank practically unbreakable. The pump is  $1\frac{1}{4}$ -inch seamless brass tubing with a brass valve, and is sealed into the top of the tank with heavy threads following the construction used in the best makes of fire extinguishers.

This sprayer will handle Whitewash, Water Paints, Bordeaux Mixtures, etc., perfectly.

For whitewash and all heavy mixtures it is necessary to use a "W. W." Cap in nozzle, which is furnished with sprayers. These sprayers are made in galvanized steel or brass as ordered. Equipped with 4 feet of hose. Weight, packed, 14 lbs.

Galvanized Steel .....\$7.50  
All Brass .....\$10.50  
3 ft. brass extension rod .....\$1.00

F. O. B. Los Angeles



### SPRAY HOSE

Heavy, high pressure hose for power pumps: .25c per foot  
 $\frac{3}{8}$  inch .....  
 $\frac{1}{2}$  inch .....30c per foot  
Five-ply hose for use on small spray pumps: .17c per foot  
 $\frac{3}{8}$  inch .....  
 $\frac{1}{2}$  inch .....21c per foot

### Utility Barrel Pumps

Cylinder is made of heavy brass,  $2\frac{1}{2}$  inches in diameter. Brass plunger can be adjusted without removing, having special treated cotton wick packing to prevent corrosion by chemicals. All working parts that come in contact with liquids are brass. Bronze ball valves easily removed. Pressure of 150 to 200 pounds can be maintained.

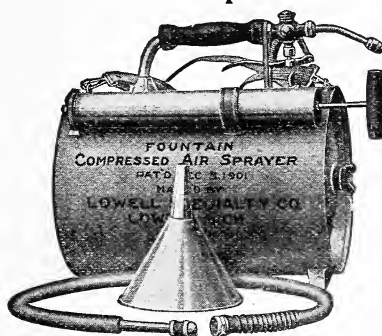
In complete outfits we furnish our patented Utility adjustable nozzle which always gives control of spray at nozzle end. A fine strainer avoids sediments getting into working parts.

Utility No. 50A— $2\frac{1}{2}$  in. cylinder complete as shown in cut. Without Barrel—Price \$22.50, f. o. b. here. Weight crated 50 lbs.

Utility No. 90A,  $1\frac{1}{2}$  in. cylinder without barrel, \$17.00 f. o. b. Los Angeles.



### Lowell Compressed Air Sprayer



Lowell Compressed Air Sprayer

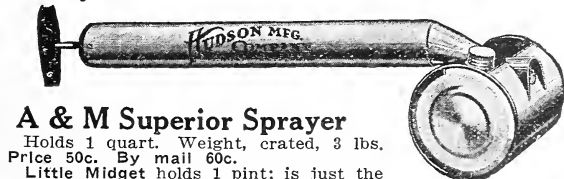
### Bucket Pump, No. 95

All working parts of this pump that come in contact with spray solutions are brass. By removing variable disc a straight stream can be had for washing windows, automobiles, etc., in addition to general spray purposes.

This is a double action pump, the air chamber being provided by the hollow plunger rod of  $\frac{3}{8}$ -inch tubing. Body of pump is  $1\frac{1}{4}$  by 19 inches, made of heavy seamless brass tubing. Pump is equipped with 2 feet of  $\frac{1}{2}$ -inch, 5-ply hose and 12 inches of  $\frac{3}{4}$ -inch pipe and our No. 80 angle service nozzle. The brass parts are highly polished and laquered; the handle and foot rest are painted a rich carmine red. Wt. 6 lbs. Price \$5.50 f. o. b. Los Angeles.



Utility No. 95

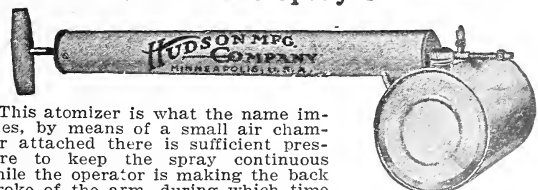


### A & M Superior Sprayer

Holds 1 quart. Weight, crated, 3 lbs. Price 50c. By mail 60c.

Little Midget holds 1 pint; is just the sprayer for home use. Price 40c. By mail 50c.

### Continuous Sprayer



This atomizer is what the name implies, by means of a small air chamber attached there is sufficient pressure to keep the spray continuous while the operator is making the back stroke of the arm, during which time other atomizers are at rest. With galvanized tank, each \$1.00. With brass tank, each \$1.25. If wanted by mail add 10c for postage.

# Gopher and Squirrel Exterminators

All Prices F. O. B. Los Angeles. Poisons Must Go by Express. Add Postage If Traps are to be Sent by Mail.



Macabee Gopher Trap



Easy-Set Mole Trap

## Macabee Gopher Trap

This is the most convenient gopher trap yet manufactured. It is easy to set, small and can be extended far down into the hole. Price postpaid, 30c.

## Box Gopher Trap

This trap is used extensively by gardeners. Is easy to set and sure. Price by mail 40c.

## Easy Set Mole Trap

Catches them going and coming. A child can set it with perfect safety. Price \$1.25 f. o. b. here.

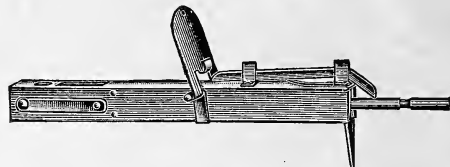
**Squirrel Poison—Moore's** (Grain). A certain and specific destruction of gophers, squirrels, crows and mice. (Small size 50c) (Medium size \$1.00) (Gallon-size \$1.90) (5 Gallon drums \$5.50).

**Gopher Scent** Improved method of poisoning gophers and squirrels. The scent attracts the gopher and draws him to the bait. We have had some wonderful reports on Gopher Scent and feel that we cannot recommend it too highly.

(Small pkg. 35c) (medium size 50c) (large size \$1.00) (15 lb. pkg. \$6.00) (85 lb. keg \$29.75) f. o. b. here. Poisons cannot be mailed.

## The Never-Fail Gopher Gun and Burglar Alarm

For the Positive Destruction of Gophers, Moles, Squirrels, Rats and Other Burrowing Pests  
Price \$1.75 Postpaid



### INSTRUCTIONS

First—Dig opening in front of hole so that the gun can be inserted in hole in position parallel to surface of ground. Then to load—open gun by tipping barrel (B) pressing on same with thumb through oblong slot and insert 38 BLANK cartridge (C); close barrel.

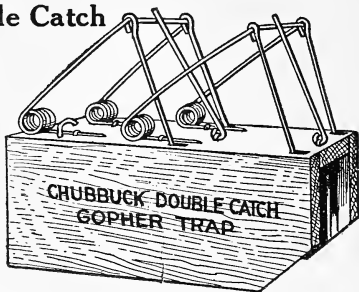
Place gun well in gopher hole, press another plate (A) into ground to steady same, then see that trigger plate (T) is free and pull back firing pin (F) until trigger (X) engages in notch (N). See that outer end (O) of firing pin (F) is free from ground.

For moles—Dig straight down where mole has thrown up mound and you will find hole. Enlarge the same enough to get ample room for gun and place same as for gophers. Mole may not come back the same day, but come he will.

As a burglar alarm it may be used in any way practicable. The best way is to place gun in any convenient place, attach thread to hole in trigger plate and string across room, keeping thread about one foot above floor. Anybody walking across floor and into the thread will set off the gun.

## Chubuck Double Catch Gopher Trap

This is the latest and surest Gopher Trap on the market. Catches either large or small gophers. And very often when the gopher is working the dirt ahead of him the trap is sprung catching him by the outer springs. Price 50c.



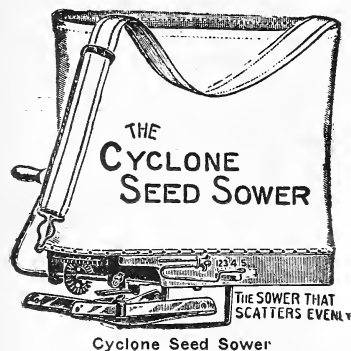
## Gopher-Gas Balls

Are used by lighting and rolling into the burrows of the gopher, the same as the Gopher Candle. (Per doz. 60c) (Box of 125, \$3.75.) postpaid. Can be sent by mail.

## SEEDERS AND PLANTERS

### Cyclone Seed Sower

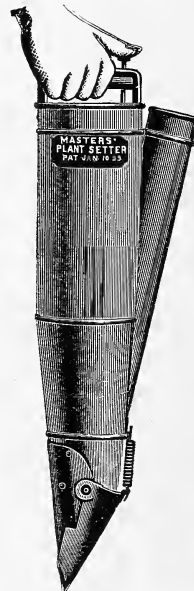
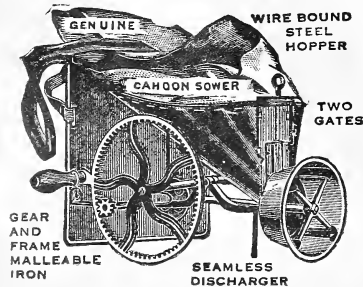
This Seeder is equipped with the following important features: Sloping feed board, automatic feed adjustment, distributing wheel, triple gears. Weight, 5 lbs. Price \$3.00.



Cyclone Seed Sower

### Hand Seeder and Planter

The Standard Sower acknowledged to be superior to all other hand sowers. Gives perfect satisfaction, and can be used for sowing alfalfa and grains broadcast. Sows from four to eight acres per hour at a common walking gait. A saving of four-fifths of the labor and one-third of the seed by its use. A person entirely unaccustomed to sowing by hand can use this machine with perfect success. Price \$6.00 f. o. b. here. Weight crated 8 lbs. Can be sent by mail.



Master's Plant Setter

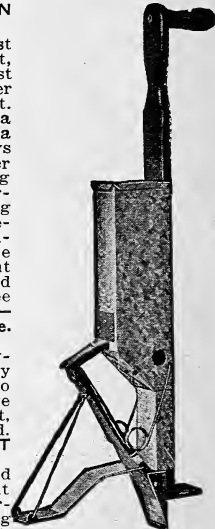
### SEGMENT CORN PLANTER

The lightest, most accurate, strongest, cheapest and most up-to-date Planter on the market. Never cracks a kernel nor skips a hill. It is always in position, never makes a wrong move. Many gardeners are using this for their re-planting, and melon growers are using it to plant watermelons and cantaloupes. (See picture). Price—\$2.00 f. o. b. here. Weight, 5 lbs.

Ask for anything you may want pertaining to garden tools; we probably have it, although not listed. MASTER PLANT SETTER

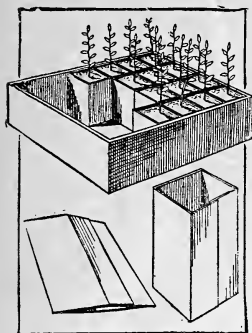
The only hand mechanical plant setter on the market. No stooping when using it, therefore no lame backs. All kinds of plants—Cabbage, Tobacco, Tomatoes, Cauliflower, Strawberries, Sweet Potatoes, etc., are set in water and covered at one operation. Weight 10 lbs.

Price—Each \$6.00 f. o. b. here. Ask for circular. If there is a new comer in your neighborhood kindly send us his name that we may mail him this catalog.



Segment Corn Planter. All large melon growers are now using the Segment Corn Planter.

## NURSERY SUPPLIES



### The Expan Planting Pot

Made of heavy tar paper. Open top and bottom. For propagating plants, trees and shrubs—no waste space—no breakage. For the nurseryman, florist and market gardener. You can grow melons, squash, canteloupes, cucumbers, etc., three weeks earlier in these pots than out in the open. When setting the plants in the field plant the pot and all, leaving about one inch above the top of the soil; this

protects the tender plant from cut worms, wire worms, moles and field mice.

#### THE EXPAN PLANTING POT

All prices f.o.b. Los Angeles

Size	Price per 1000	Price per 100	Wt. per 1000
3x4 .....	6.25	1.35	44 lbs.
2x8 .....	8.00	1.45	58 lbs.
2x6 .....	6.25	1.35	44 lbs.
2x4 .....	4.60	1.00	29 lbs.
2x3 .....	3.75	.75	22 lbs.
1½x5 .....	4.60	1.00	25 lbs.
1½x4 .....	3.75	.75	22 lbs.
<b>Paraffine Paper Pots</b>			
2x4 .....	3.50	.65	27 lbs.

### Raffia

We have natural Raffia by the pound or by the ton. Great quantities of it is used on the Los Angeles market by gardeners for tying vegetables. We are headquarters. Price—(Per lb. 30c) postpaid. For larger quantities write for price.

### Spagnum Moss

Fine grade of Eastern moss for packing trees, plants, Asparagus roots, etc. (Single pound 20c) postpaid. (Per bale, \$2.75 f.o.b. Los Angeles.

### Green Moss

Line your wire hanging baskets with this green moss. It will add to the attractiveness of the basket. Price—(per lb. 30c).

Grafting Wax—(¼ lb. 25c) (½ lb. 40c) (lb. 75c) postpaid.

Balling Twine—(5-lb. ball \$1.75) f.o.b. here.

Budding Twine—(Per ball 50c) (Postpaid 60c).

Budding Cloth—(Per square yard 70c) prepaid.

#### POT LABELS

Plain	1000	Painted	100	1000
4 .....	25c	4 .....	30c	\$3.10
5 .....	30c	5 .....	35c	3.60
6 .....	35c	6 .....	40c	4.10

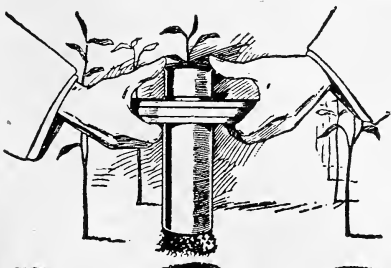
Postpaid

### Tree Labels

	100	1000
Copper Wired, painted, 3½ inch .....	.35	\$3.25
Copper Wired, plain " .....	.30	2.75
Ironed Wired, painted " .....	.30	2.85
Ironed Wired, plain " .....	.30	2.50

#### TRANSPLANTER

A Transplanter is that does the work without disturbing the roots. It first makes the hole where you wish the plant, then picks up the plant root and all, without disturbing it, and sets the plant into its new location without checking its growth. A child can operate it. Just the thing for Eucalyptus growers and nurserymen. (50c) (by mail 60c).



Taken out of here - to be set in here  
Transplanter

### AMCO GARDEN HOSE

All hose looks alike to the average person, and the buyer is usually at the mercy of the seller. In buying hose from us you are dealing with an established firm, and we go further than that by putting our name on the hose we sell, which signifies that we are not afraid of the quality. Amco hose is made expressly for us. Quality and price are right.

½ inch, 25 foot lengths with ¾ inch couplings .....	\$3.50
½ inch, 50 foot lengths with ¾ inch couplings .....	6.75
¾ inch, 25 foot lengths with ¾ inch couplings .....	4.25
¾ inch, 50 foot lengths with ¾ inch couplings .....	8.25

## Thompson's Tree Support



prop. (Per 100, \$2.50)

Place the supports above projecting branches on the limb to secure them against slipping down. These supports are out of the way of everything. They are perpetual. There is no further expense after putting on. The proposition is simply to make opposite limbs support each other, or the center limbs to support the outer limbs, thus doing away entirely with the ordinary wooden

## Yucca Tree Protectors



The Yucca Tree Protector is made from the soft spongy Desert Palm, and will last years exposed to the weather. Wires go entirely around the protector, thus holding it in place, even should it crack a little while in use. Protect your trees against the hot rays of the sun, rabbits, gophers, and be sure to use this protector if bothered with Tree Borer.



Size	Lbs.	Per 100	Per 1000
14 in. ....	90	\$1.75	\$12.00
30 in. ....	200	2.50	21.00
18 in. ....	125	2.00	15.00
24 in. ....	150	2.25	18.00

Paraffine

Yucca

## Paraffine Paper Tree Protectors

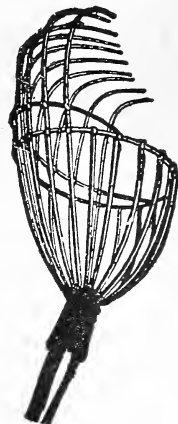
These Protectors are perforated, giving a free circulation of air around the tree trunk. The Paraffine preserves the paper, making the Protector very durable. Will not split or tear.

All prices f.o.b. Los Angeles

Size	Per 1000	Price	Price
	Lbs.	\$12.50	\$1.75
14 in. ....	50	15.00	2.00
18 in. ....	65	18.00	2.25
24 in. ....	85	22.00	2.50
30 in. ....	106	28.50	3.50
36 in. ....	127		

## Pennsylvania Fruit Picker

No ranch is completely equipped without this valuable tool. It is always the choicest fruit that cannot be reached from the ladder; you do not wish to knock it down with a club, as the fall would bruise it. Use the Fruit Picker and the fruit is caught in the pocket prepared for it. Every ranch that has half a dozen or more fruit or walnut trees should have one or more Pennsylvania Fruit Pickers. (Price 75c) (by Mail 85c).



Every thing that is offered in this book has been tried and is practical. If you need anything listed here do not hesitate to order it.

Pennsylvania Fruit Picker

## "Norcross" Cultivators—Hoes and Weeders

The Modern Tools—For Garden and Flowers



Like the human hand, these tools cultivate closer to plants without injuring them, than any other implement known, leaving the soil level, loose and untrampled.

Cost but a trifle more than the common hoe—accomplish much more and better work with decidedly less labor. The sharp, tapering shovels enter the soil freely, literally tearing up every inch of it, from 1 to 6 inches deep, as required.

PRICES EACH—5-prong (wt. 3 lbs.), \$1.50; 3-prong (wt. 2 lbs.), \$1.10; Midget (wt. 12 oz.), 65c. Postage extra. See postal rates on inside front cover page.



# BARGAIN COUNTER

We have on hand at our Market Branch, 767 Central Avenue, (opposite the Terminal Market), an accumulation of parts of various Hand Cultivators, Seeders, and Shovels for horse cultivators. It is a bargain counter. We invite you to look it over, you may find what you want at your own price.

## PLANET, JR. GARDEN TOOLS

### No. 4 Planet Jr.

No. 4-D  
Seeder Only

Combined hill and drill seeder, single wheel hoe, cultivator and plow. This is the ideal machine for the family garden. May be changed from seeder to cultivator in a few minutes. Your boys and girls will enjoy gardening with this tool. Price \$22.25 f. o. b. Los Angeles.

No. 4-D Price \$17.50.

### No. 25 Planet Jr.

Combined hill and drill seeder, double or single wheel hoe, cultivator and plow. This is a larger tool and is used by onion growers, lettuce growers and market gardeners. Also a good size for the large family garden. Price each \$26.75 f. o. b. Los Angeles.

### No. 3 Planet Jr. Hill and Drill Seeder

The most useful and accurate seed drill for the market gardener. Growers whose plantings are so large that they require separate seed drills and separate wheel hoes will find that this machine will save enough seed in one year to pay for it. Drops in hills, 4, 6, 8, 12, and 24 inches apart; sows in drills in narrow straight line, at proper depth, covers, rolls and marks out the next row in one operation. Price \$21.50 f. o. b. Los Angeles.

### No. 11 Double and Single Wheel Hoe

One pair 6-inch hoes, one pair 4½-inch hoes, four cultivator teeth, one pair plows, two 3-tooth rakes, two 5-tooth rakes, two leaf-lifters. The steel frame can be set at different heights to suit. This is one of the most complete implements we have. Each \$17.25 f. o. b. Los Angeles.

### No. 12 Double and Single Wheel Hoe

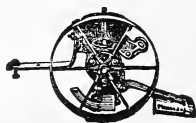
One pair of 6-inch hoes, four cultivator teeth, one pair plows, two leaf lifters. The same as No. 11 except that the 4½-inch hoes and the rakes are omitted and the price is correspondingly less. Each \$13.50 f. o. b. Los Angeles.

### No. 13 Double and Single Wheel Hoe

The No. 13 is the same as the No. 12, except it has only one pair of 6-inch hoes—the most useful of the cultivating attachments, and all that many growers need. Rakes, plows, cultivator teeth, and 4½, 7½ and 9 inch hoes can be added at any time. Each \$9.75 f. o. b. Los Angeles.

### No. 35 Seeder Attachment

The result of an insistent demand for a small seeder attachment for use with Planet Jr. wheel hoe or garden plow and cultivator, with the exception of the Fire Fly Plow. Suitable for small family gardens. Sows a five-cent packet of seed as economically as a full hopper. Quickly attached.



### No. 17 Single Wheel Hoe

One pair of 6-inch hoes, three steel cultivator teeth, one large garden plow. Same as No. 16 except in equipment. Each \$9.35.

Planet Jr. tools are made to suit every purpose for the convenience of the gardener.

### No. 19 Garden Plow and Cultivator

A very useful implement, especially designed for the farmers' garden work. It offers to every one with either field or garden crops, a cheap and effective tool for wheel hoe operations. The variety, design and quality of these tools makes the implement light running and effective. It is strong, well made, quickly adjusted, and the height of handles can be changed to suit man, or woman, boy or girl.

Each \$3.75 f. o. b. Los Angeles

### No. 119 Planet Jr.

A very popular high wheel cultivator, fully equipped as shown in picture. This is a durable all-purpose tool. The No. 35 seeder attachment may be used with tool, and makes an inexpensive combination. Price \$5.90 each f. o. b. Los Angeles.

### The Bacon Hand Drill

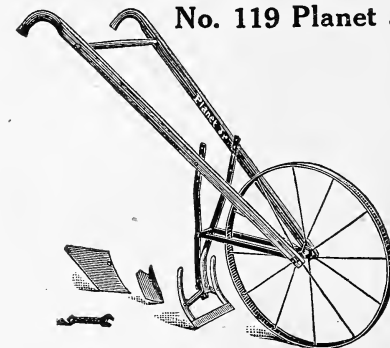
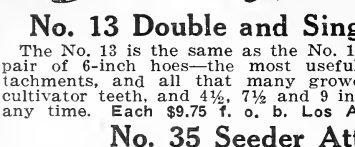
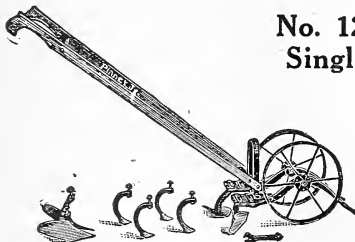
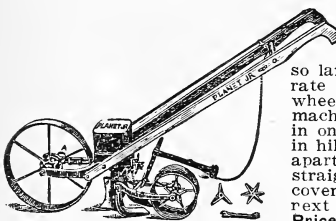
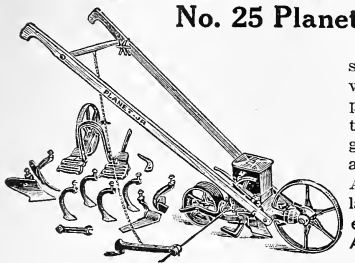
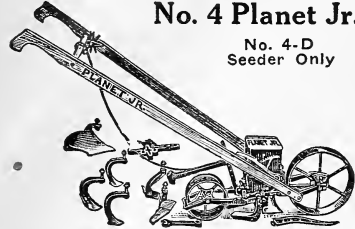
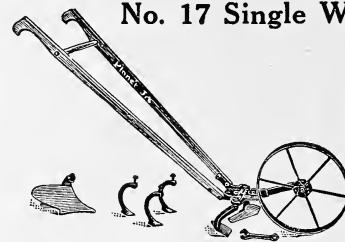
We have been handling the Bacon Drills since 1899, and the many customers who are using them are unanimous in praise of their durability and accuracy. All who have used this drill claim it is the most durable of all, absolutely reliable to sow evenly from one end of the row to the other. Has angle steel frame with Hill Dropper, Agitator and Front Wheel Extensions of Malleable iron, giving strength with lightness.

The Hill Dropper will deposit seeds in hills, 9, 12, 18 or 36 inches apart.

The feed, while simple, handles a very large variety of seed, getting an even distribution that is unequalled, and very noticeable in sowing Salsify, Parsnip, Prickly Spinach, Peas, Beet, etc., getting an even row with light seeding.

The feed will also handle Phosphates, which can be sown before or after seeding.

The Drills have a Shoe Opener, which deposits seeds in a narrow line, allowing close cultivation, saving hand labor. No. 10—Hill and Drill Seeders, \$10.00.

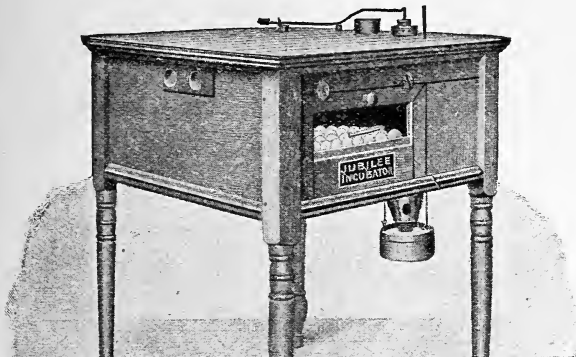


# INCUBATORS and POULTRY SUPPLIES

Not every little thing is listed in these pages. If you do not see it, write us or ask the salesman for what you want. Incubators, Brooders and all Poultry Supplies are on sale at the branch store: 767 South Central Avenue. There is no parking limit on Central Avenue.

## JUBILEE INCUBATOR

All Prices F. O. B. Los Angeles



Jubilee Incubator

After years of experience in the manufacture of incubators the Jubilee has now reached a stage when it has become a necessity to the poultryman.

The Jubilee is manufactured from the best class dry California Redwood that is durable and built by efficient workmen, with up to date machinery.

Some of the main features are: egg chambers lined with heavy wool felt covered with non absorbent paper which prevents absorption by the carbonic gases given off by the growing chicks. The regulator is the most simple, sensitive and durable of any regulator in existence. Ventilation is perfect and correct in practice. Moisture is taken care of by a special moisture pan which derives its heat from the boiler.

### Ask for Special Leaflet

LET OUR SALESMEN SHOW YOU THIS WONDERFUL MACHINE. MADE IN THE FOLLOWING SIZES:

Capacity	Weight	Dimensions	Price
108 Egg	110 lbs.	2'8" x 3'	\$37.00
216 Egg	150 lbs.	2'8" x 4'3"	48.00
324 Egg	200 lbs.	2'8" x 5'3"	60.00
504 Egg	260 lbs.	3'2" x 7'2"	78.00

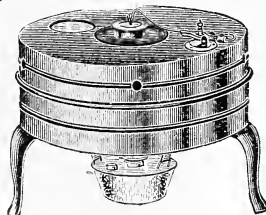
## Our Little Baby Grand Incubator

50 EGG CAPACITY, ALL METAL

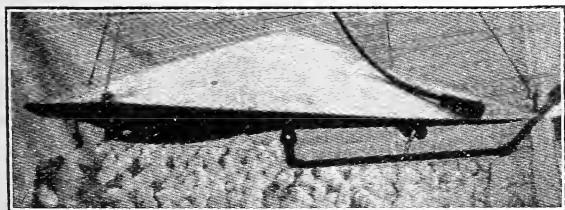
For the back yard poultry raiser wanting to make the most money out of a few chickens, this small incubator renders a wonderful service and gives the greatest satisfaction. Every foot of ground in our cities and villages available for cultivation or poultry purposes should be utilized not only for the profit there is in it, but for the satisfaction of producing something.

Shipped by Express or Parcel Post. Weight in Carton 20 lbs. Price \$10.00 f. o. b. here.

Just the thing for the small fancier. Simple in construction, easy to operate, self regulating and shipped in cartons. We make the same guarantee on this little incubator as we do our larger styles.



## PAYNES GAS BROODER



Here is a perfect gas brooder that is strong, durable and easy to operate. It is complete with burner and ropes and pulleys for raising for cleaning purposes. Absolutely no fumes, smoke or odors.

You must see this Brooder to be convinced of its simplicity.

Made in two sizes—

28 in. Hover—250 chicks	\$10.00
34 in. Hover—500 chicks	12.00

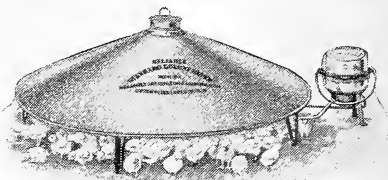
## IMPROVED RELIABLE BROODER

Raise Your Chicks the Scientific Way  
Standard Blue Flame Wickless, Oil Heated Colony Brooder

### PRICE

No. 1—500 Chick  
Size, \$21.00 f. o. b.  
Los Angeles.  
Weight 38 Lbs.  
Packed

No. 2—1000 Chick  
Size, \$25.00 f. o. b.  
Los Angeles  
Weight 45 Lbs.  
Packed



We buy Reliable Brooders by the carload. They are in use by the thousands throughout the big poultry sections of California, and every user is a booster for the Reliable. The heater is positively "fool proof." Has no valves to clog up and cause trouble. The burner is operated on an oil level and is adjusted to the maximum flame at the factory so that it is impossible to overflow it. The flame can be adjusted to any height desired by a simple lever device which is easy to understand and operate. All heaters are shipped out fully assembled and tested for leaks. All that is necessary is to fill the oil reservoir and touch a match to the lighting ring and you are ready for action. The cost of operating the Reliable is very low and you can fill the brooder to capacity or you can brood as few as you like, with equal success.

The Reliable is automatically ventilated without any trouble to the operator, and the chicks which are placed in its care are assured of steady, healthy growth.

It is endorsed by many agricultural experiment stations, including the College of Agriculture at Berkeley, and hundreds of our own customers.

This 1924 model blue flame, wickless oil heater colony hover will save you time, money and worry. At last we can offer to the chicken raiser a perfect heater that has an absolute flame control and is easy to regulate. It is valueless and works on a positive oil level so cannot clog and go out during the night hours and so chill your chicks. The burner is connected to the feed pipe by means of a flexible tube with positive connections at each end, this making it leak proof and safe. It is equipped with an indicator dial so the flame can be easily and quickly turned to any desired size. The lifting device is positive in acting and there is no danger of it being changed by the chicks. The brooder is supplied with a one gallon glass oil container and the supply will last from 24 to 36 hours.

You can operate this brooder to full capacity or just as low as desired with equal success. It burns with a clear blue flame minus fumes or odor. A great advantage with the heater is that there is no packing or stuffing box arrangement to get loose or leak. Only the best grade long fiber asbestos is used in the lighting rings which are reinforced with a perforated metal ring. They burn less oil than a metal vaporizer.

No.	Capacity	Shipping Weight	Price
1	500 Chicks	38 lbs.	\$21.00
2	1,000 Chicks	45 lbs.	25.00

## THE LOS ANGELES BROODER HEATER

The Los Angeles Incubator Heater is the greatest labor and chick saver which has been brought before poultry keepers.

The heater is heavy, rolled copper and has 1 1/2 inch tubing and is capable of heating 30 feet of brooder box on each side of the heater.

We furnish a Hawks high power gas burner with each Heater and two with the larger size. If you do not have gas a No. 1 Reliable coal oil heater can be used to heat this system.

The heater is equipped for 3/4 inch pipe but we do not supply the pipe.

WE ARE ALWAYS GLAD TO ANSWER QUESTIONS

### Prices

ROUND—Capable of heating 30 ft. pipe on each side, including a gas burner	\$23.00
OBLONG—Capable of heating 50 ft. pipe on each side, including 2 gas burners	\$29.00

## POULTRY SUPPLIES

We carry a full line of Incubators, Brooders, and Poultry Supplies of every description. We list here only small poultry requisites that are easily mailed. We prefer that large items be purchased of your local dealer, but if your dealer does not carry the supplies listed here, we will greatly appreciate your order. It shall have prompt attention.

Our headquarters for Poultry Supplies is at our Market Branch, 767 Central Avenue, (opposite the Terminal Market) when in the city please call at this address.

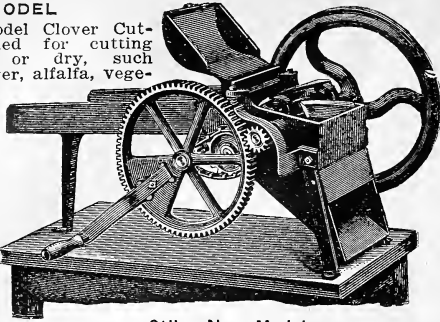
## CLOVER CUTTERS

### NEW MODEL

The new Model Clover Cutter is designed for cutting either green or dry, such growths as clover, alfalfa, vegetable tops, etc., in 8 eighth-inch lengths.

Made only in one size. Knives can be adjusted and easily sharpened.

Price \$19.00, f. o. b. here.



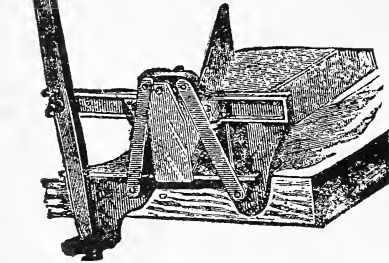
Stiles New Model

## PERFECTION GREEN FEED CUTTER

Operates on the same principle of an alfalfa mowing machine. The same knife is used and operated, back and forth in grooves, by the hand. It requires very little exertion and does the work neatly and quickly. The grass is cut any desired length by adjusting the regulator.

We recommend it to the owners of small flocks, and for use in back yards of half a dozen or more hens.

May be sent by parcel post. Wt. 7 lbs. Price \$5.75 f. o. b. Los Angeles.



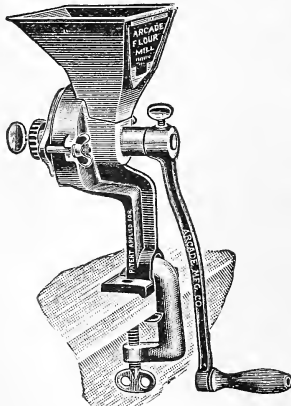
## THE ARCADE GRINDING MILLS

The Arcade Flour Mill is called the "Home Mill." It is adapted for grinding whole grains into flour. There is not another machine on the market that compares with this mill for the housewife. It is made of best hardened steel, beautiful finish and needs no repairs except the burrs, which may be replaced at a very low price.

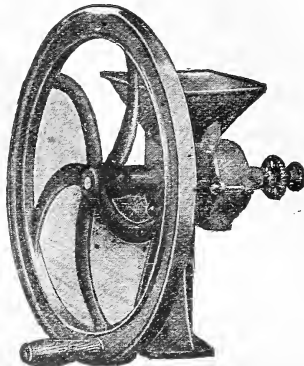
No. 1 Arcade Mill—weight 10 lbs., Price \$4.50.

No. 2 Arcade Mill—weight 10 lbs., Price \$9.50.

Extra burrs for Nos. 1 or 2, \$1.50 set. f. o. b. here.



Arcade Flour Mill



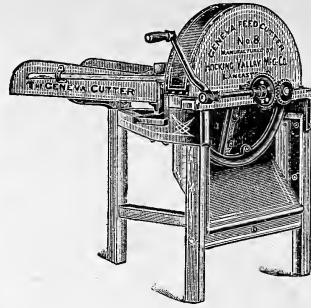
Stover No. 32

### Stover

This machine grinds oats, peas, dry bone, shells, etc., for feeding to poultry.

No. 32—18-inch fly wheel. Weight 45 lbs. Price \$7.50 f. o. b. here.

## GENEVA CLOVER CUTTERS



This is the most satisfactory machine for the large poultry raiser. The knives are on a balance wheel and the machine will cut from 1/4 to 1/2 inches. May be used as a hand or power machine.

We carry three sizes:

No. 6—weight 200 lbs., Price \$48.00.

No. 8—weight 240 lbs., Price \$52.00.

No. 10—weight 280 lbs., Price \$70.00.

Pulley for No. 6 or 8, \$3.00.

Knives for No. 6, \$2.00 each.

Knives for No. 8 or No. 10, \$2.20 each.

F. O. B. Los Angeles.

## BONE CUTTERS

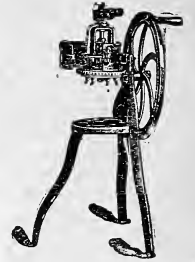
### MANN'S NO. 7

The New No. 7 is mounted on a strong iron stand and has patent automatic governing spring feed. Large, open-hinged cylinder, giving instant access to all working parts; has six knives, gear guard, anti-clog device, heavy balance wheel and other improvements. (See cut).

Price List of Mann's Bone Cutters f. o. b. here.

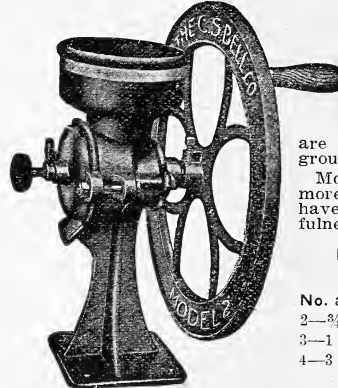
No. 7 (B. W. and iron stand) Price \$23.00, wt. 107.

No. 7 1/2 (hand or power) Price \$30.00, wt. 150.



Model No. 7—Price \$23.00

## MODEL HAND GRINDER



Model Grinder

The original family grist mill. Model Mills have harder burrs which run accurately, they are painted to a high finish, not dipped. The parts are smooth castings, carefully ground and fitted.

Model Mills last longer, do more and better grinding and have a broader range of usefulness.

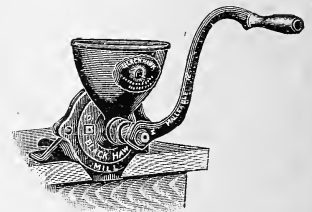
### List of Sizes We Carry

No. and Capacity	Wt.	Price
2—3/4 to 2 1/2 bu. per hr.	35	\$7.00
3—1 to 3 bu. per hr.	63	9.00
4—3 to 5 bu. per hr.	35	13.50

f. o. b. here.

## Black Hawk Feed Mill

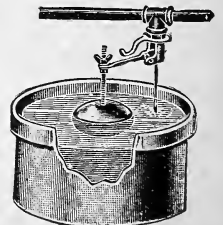
The grist mill without a fault. Light running, well built. It will last a lifetime. Grinds all kinds of grain, fine or coarse. Price \$4.25 f. o. b. here.



Black Hawk Feed Mill

## THE "DANDY" AUTOMATIC FOUNT

Something poultry raisers have been seeking for years—an automatic fountain that will do the work and keep at it. We have in the "Dandy" a fountain made of brass and nickel plated, with a ground valve which fits perfectly, thereby prevents clogging. Can be attached to any pipe same as faucet. Does not corrode or rust. Price 50c each, f. o. b. Los Angeles.

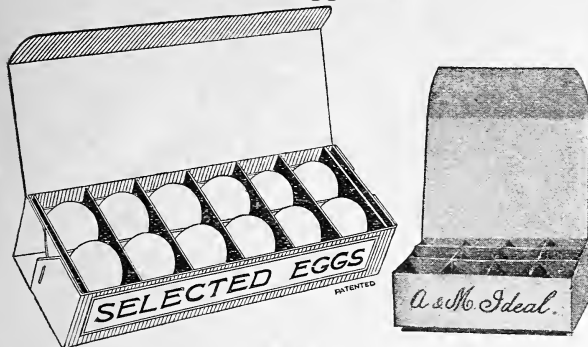


## FOUNTS and FEEDERS

We have on hand at all times a full line of Galvanized Founts and Feeders, also a complete line of Sanitary S. one Founts and Feeders for Poultry and Rabbits; also Galvanized Hoppers for dry mash and grain, all sizes.

If your local dealer does not carry these, please call at our store or write for them.

### A & M Egg Boxes



2x6 Eggs

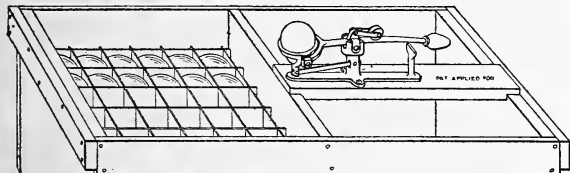
3x4 Eggs

These boxes are strong and neatly made, partitions full, thus protecting the eggs.

Very convenient for marketing eggs by the dozen.

Prices: 2x6—1 doz. 30c; 100, \$2.00.  
3x4—1 doz. 25c; 100, 1.85.

## RELIABLE EGG SCALE



The RELIABLE Egg Scale is built for speed, accuracy and endurance.

With this scale you can grade your eggs quicker, easier, and get them exact with much less effort than with any other scale on the market.

The RELIABLE Egg Scale has a quick double shift, just a flip of the finger, and you can get all the weights required with the one shift, thereby taking the place of two scales.

The scale has four steel knife-edge bearings, which guarantees a correct weight and long life.

The scale is mounted upon a base which fits the egg case, making it convenient for packing, and eliminates one handling of the eggs.

Sold at your dealers on a guaranteed and money-back basis.

## SEARCHLIGHT EGG TESTER



Infertile eggs in an incubator mean a loss of time and money. The testing of eggs is a very important part of incubation and a little expense at the beginning will pay well in the end. The Searchlight will do the job quickly and do it well. It should be a part of your equipment, whether you are operating one incubator or a dozen. Postpaid \$5.10.

### A & M Egg Testers

No. 2—Tin with opening on side 40c postpaid.  
No. 3—Tin made to fit any lamp, 50c postpaid.

### China Nest Eggs

We handle only the best grade of glass eggs, strong and durable. 75c dozen, 85c postpaid.



## POULTRY INSTRUMENTS CAPONIZING SET

This set is one of the latest design. It is a combination of tools that can be used with one hand and seldom causes the operator to slip and cause the loss of the bird.

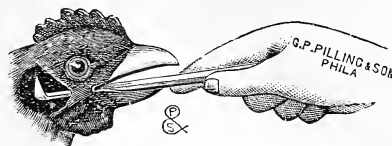
We carry the following sets:

Pillings Cornell .....\$5.50  
Pillings Farmer .....4.00  
Pillings Special .....5.00

We suggest that you use either the Cornell or Farmer. They are packed in a fine oak case. Each set contains full instructions.



## PILLING ANGULAR KILLING KNIFE



Showing the Angular Killing Knife

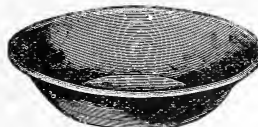
By simply turning the wrist the jugular vein and spinal cord are cut, thereby bleeding the fowl, allowing the feathers to be removed without using water. 85c postpaid.

## PILLING FRENCH POULTRY KILLING KNIFE

Every poultry raiser should have one of our Killing Knives. They are made of a finely tempered instrument steel with nicked handle; will last a lifetime. Don't wait. Send for one now. Sent securely packed by mail on receipt of price. 85c postpaid.



## Pigeon Nests



Price 35c

## Petty's Poultry Punch



Price 25c

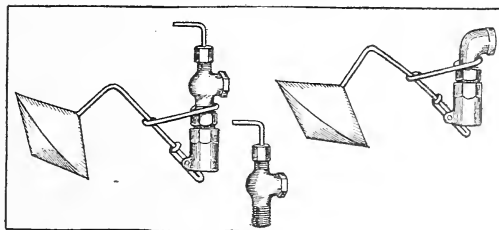
## Reliable Spring Punch

This punch operates very easily because a spring reverses the action of the lever and brings it into position. It is always ready. Price 25c postpaid.



## "THE WATER BOY"

### Automatic Fountains for Poultry and Pet Stock



No. 1

No. 2

No. 3

"The Water Boy" never forgets to fill the water jar, but furnishes just enough and no more.

It makes no difference to "The Water Boy" how large the dish or how small the pan, if so much water is required, it gives that much and no more.

For the baby chicks, the flock of hens, ducks, pigeon baths, fish ponds, horse troughs or any vessel where a constant supply of water is needed without an attendant.

Number 1 is called "The Water Boy" Combination, as the upper part is a shut-off and pressure regulator combined with the "Water-Boy" automatic float valve. The advantages of this combination are to regulate any pressure and flow, act as individual shut-off in case automatic becomes clogged, thus avoiding disturbance of the rest of the water line, and the fowls need not be without water if the one needs repair. Price \$1.50 postpaid.

## LEG BANDS FOR POULTRY

Spir-ol Leg Bands are made in six colors and all sizes, and are put on and taken off like a key ring. Can't drop off. Colors are black, white, red, yellow, blue, green, purple, light blue, maroon and pink. In ordering please state color wanted, also name of breed, Leghorn, Rocks, Rhode Island Reds or Turkeys. It enables us to fill the order satisfactorily. Prices:

12 Bands for.....	\$ .15 postpaid
25 Bands for.....	.25 postpaid
50 Bands for.....	.50 postpaid
100 Bands for.....	.75 postpaid
500 Bands for.....	3.60 postpaid
1000 Bands for.....	7.00 postpaid

Spir-ol Band for Chick, Bantam and Pigeon size as follows: 12 for 15c; 25 for 25c; 50 for 40c; 100 for 65c; 500 for \$3.00; 1000 for \$5.50. These bands come in the same colors as given above for Poultry Bands.



Spir-ol Leg Bands  
FLAT ALUMINUM  
LEG BANDS  
These bands fit  
any variety fowls.



Price—(Numbers run from 1 to 1,000) (25 for 30c) (50 for 50c) (100 for 75c) postpaid.

### ECLIPSE DOUBLE NUMBER COLORED—



For  
Chickens

Large double numbers on colored background. In 12 colors, 3 sizes. State breed and set. (12 for 40c) (100 for \$2.75) postpaid.

## PHENOLA

A combined white, cold water paint and disinfectant. It is a health insurance for stock and poultry.

1 lb. ....	Price \$ .25
5 lb. ....	1.00
10 lb. ....	1.80
25 lb. ....	4.00

## ALBATROSS PURITOL

Keeps the Coops and Barns White and Sanitary.

Albatross Puritol is a white disinfectant paint in dry powdered form and is ready for use when mixed with cold water. It is one of the best forms of health insurance for stock and poultry. May be applied to any solid surface, such as wood, cement, brick, stone or iron, and when dry will be snow white.

It is economical in cost, is durable, easy to apply and is a powerful disinfectant. It kills mites, fly eggs and lice.

Price (1/2 lb. pkg. 40c) (5 lb. pkg. 90c) postpaid. (25 lb. drum \$4.25) (50 lb. drum \$8.00) f. o. b. here.

## PARCEL POST AND SHIPPING BOXES

These boxes are made of heavy corrugated paper, three thicknesses, and are especially adapted for parcel post shipping:

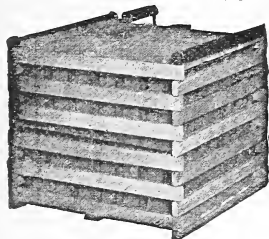
1 dozen size.....	15c each	30 egg size.....	35c each
2 dozen size.....	25c each	50 egg size.....	70c each
15 egg size.....	25c each		

Postage Extra

## BABY CHICK SHIPPING BOXES

25 Chick size.....	\$ .30 each
50 Chick size.....	.40 each
100 Chick size.....	.60 each

Postage extra



### HUMPTY-DUMPTY EGG CARRIER

One of the handiest egg carriers on the market. This carrier will hold twelve (12) dozen eggs. Can be folded flat for shipment and is made of strong but light wooden slats fastened with strong steel wires. Very handy and something every poultryman should have. Price, 95c each, f. o. b. Los Angeles. Weight 6 lbs.

## Warner Junior Poultry Fencing

Warner Junior Poultry Fence is made of No. 18 galvanized wire with No. 14 wire top and bottom, stay wires placed 4 1/2 inches apart. At the bottom of the fence mesh is 1 1/2 inch and gradually widens as the top is reached.

Put up in 10 rod rolls.

f. o. b. here

Weight	
3 ft. wide, 33 lbs., per roll.....	\$5.00
4 ft. wide, 36 lbs., per roll.....	5.50
5 ft. wide, 40 lbs., per roll.....	6.25
6 ft. wide, 48 lbs., per roll.....	6.95

Subject to market fluctuations

We are Sole Agents in the Southern Half of California for

## DR. HESS' AND CLARK'S POULTRY FOODS AND REMEDIES



Prices quoted are f. o. b. Los Angeles. If wanted by mail add postage at zone rates. Liquids cannot be mailed.

## DR. HESS' POULTRY PANACEA Helps to Keep Poultry Healthy and to Make Hens Lay



The Dr. Hess' Poultry Panacea should be fed regularly the year round if you would obtain the best results from your flock. Car loads of this proven food tonic are sold in the large poultry districts of California. It is an excellent tonic for moulting time, is an egg producer, is an economical and highly satisfactory food. Send for Dr. Hess' Poultry Book and a free sample of Panacea. Prices: 1/2 lb. pkg. 30c, 3 lb. pkg. 60c, 7 lb. pkg. \$1.25, 25 lb. pail \$3.50, 100 lb. drum \$12.00.

### Dip and Disinfectant

Small .....	60c
Quarts .....	90c
2-quarts .....	\$1.50
1 gallon .....	\$2.25
5-gallon can .....	\$9.50

### Fly Chaser

1-qt. size .....	75c
2-qt. size .....	\$1.25
1-gal. size .....	\$2.00

### Instant Louse Killer

1 lb. pkgs. ....	30c
2 1/2 lb. pkgs. ....	60c

### Worm Powder

Package .....	50c
---------------	-----

### STOCK TONIC

Small size .....	35c
Large size .....	75c
25 lb. Pails .....	\$3.50

### Roup Remedy

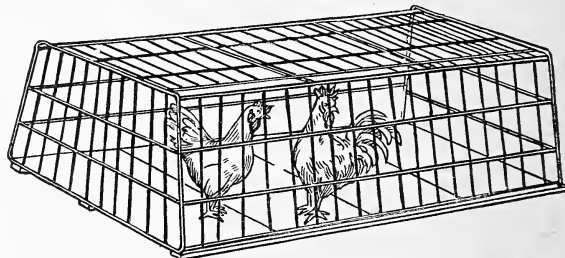
4 oz. cans.....	25c
10 oz. cans.....	50c

White Diarrhoea Remedy.....25c

### Healing Powder

4 oz. Can .....	25c
10 oz. Can .....	50c

## WIRE SHIPPING COOP



This Coop is made of galvanized steel wire and bars which are electrically welded. It is strictly sanitary, will not rust, has bottom made of seasoned hardwood with cleats on top and on under sides. Bottom can be quickly and securely attached and can be quickly detached for shipping empty. It is built on taper, allowing crates to be telescoped when shipping empty. This coop is very light, weighing only 24 lbs. Is very strong; will last for years. Positively the most durable, economical and satisfactory shipping coop made. Standard size, 27x41x13 in. high, weighs 24 lbs. Price \$5.00 each Turkey size, 27x41x20 in. high, weighs 27 lbs. Price \$6.00 each Extra bottoms for coop.....Price 1.50 each F. O. B. Los Angeles

## BUHACH POWDER

For dusting setting hens and baby chicks. No danger in using it. Pkgs. 25c.

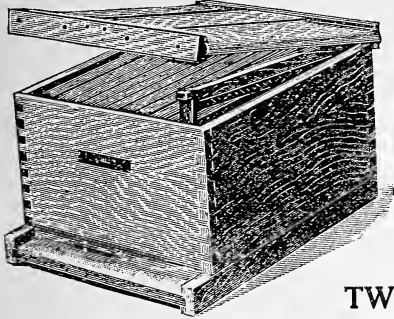
# BEE SUPPLIES

Having had numerous inquiries in the past for Bee Hives and Bee Keepers' supplies, we wish to announce to our friends and patrons that we have now added a department in this line.

Those interested in the Bee keeping industry either in a small or large way will find our stock up to date.

Customers ordering by mail will be able to figure the cost of postage by consulting the first page of this catalog, also the weights opposite the article required. Our headquarters for Bee Supplies is at our Market Branch, 767 Central Avenue (opposite the Terminal Market), when in the city please call at this address.

## ONE-STORY STANDARD HIVE WITH BEVEL FLAT COVER



This is the hive most generally used by large honey producers, as it is light and easily moved from one location to another. It is made of the highest quality white and sugar pine perfectly milled.

It is a 10 frame hive and measures 16¼x20 inches and 9½ inches deep, outside measurements.

Hives in the flat are furnished with nails, tin rabbits, reversible bottom board, bevel flat cover, Hoffman frames, no division board. If supers are desired these should be ordered extra, also comb foundation, and wire for frames.

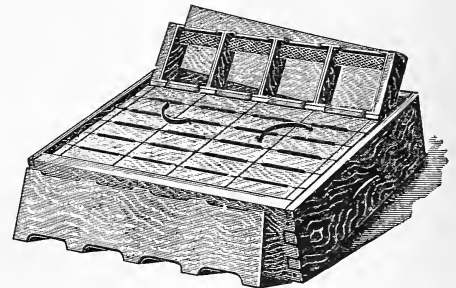
Ten Frame	One Story Hive as Described Above with	Weight	Price f.o.b. here
1 Nailed and Painted	No Foundation	26 lbs.	\$ 3.85
5 Knocked Down	No Foundation	129 lbs.	12.00
1 Nailed and Painted	With Full Sheets	28 lbs.	5.25

## TWO BEEWAY SECTION SUPER

This section super 4¼x4¼x1½ is the most commonly used. It takes slotted section holders, slotted wood separators, follower and springs, and is furnished with or without sections, and with or without full sheets foundation. This super may be used with any of the single or double walled hives tiered up one or more high. The 10 frame size contains 23 sections.

When the supers are filled ready to be removed, use the bee escape board to free the supers of bees.

Super complete without sections includes nails, flat tins, super springs, slotted section holders, slotted separators, and follower.



Ten Frame	Description	Wt.	Price f. o. b. here
1 Nailed and Painted	Empty Super only, no Fittings	4 lbs.	\$ .70
1 Knocked Down	Empty Super only, no Fittings	4 lbs.	.50
5 Knocked Down	Empty Super only, no Fittings	20 lbs.	2.20
1 Nailed and Painted	Super without Sections or Foundation	7 lbs.	1.65
1 Knocked Down	Super without Sections or Foundation	7 lbs.	1.10
5 Knocked Down	Super without Sections or Foundation	35 lbs.	5.00
1 Nailed and Painted	Super with Sections and Full Sheets	9 lbs.	3.00

### Weight 100

Extra Slotted Section Holders for Supers  
Extra Slotted Separators for Supers  
Extra Follower Boards for Supers

35 lbs.	.45
8 lbs.	.25
25 lbs.	.25

### Price Per 10

100	\$4.00
2.00	2.00
2.00	2.00

### Price f. o. b. here

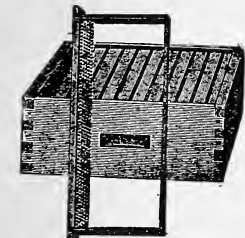
100	\$4.00
2.00	2.00
2.00	2.00

4¼x4¼x1½ beeway section super

## SHALLOW EXTRACTING SUPERS 5 11/16 Inches Deep

This Super is used for producing extracted honey in shallow frames. This is the regular extracting super 5 11/16 inches deep and is furnished with shallow Hoffman frames, 5½ inches deep with or without foundation.

Price furnished empty or with frames. No tin rabbits or division boards furnished.

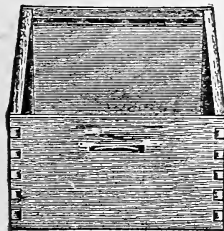


Shallow Extracting Super  
5 11/16 Inches Deep

Ten Frame	Description	Weight	Price f.o.b. here
1 Nailed and Painted	Empty Super Body, no Frames	5 lbs.	.75
1 Knocked Down	Empty Super Body, no Frames	5 lbs.	.55
5 Knocked Down	Empty Super Body, no Frames	24 lbs.	2.50
1 Nailed and Painted	Super with Shallow Frames, no Foundation	8 lbs.	1.65
1 Knocked Down	Super with Shallow Frames, no Foundation	8 lbs.	1.10
5 Knocked Down	Super with Shallow Frames, no Foundation	42 lbs.	5.00
1 Nailed and Painted	Super with Frames and Full Sheets	9 lbs.	2.50

## HIVE-BODIES

This body is the standard hive of Langstroth dimensions, 10 frame size, 16¼x20 inches and 9½ inches deep. The hive body may be used either as a brood chamber, i. e., the lower story of the hive, or as a super, for extracted honey, thus forming a two-story hive.



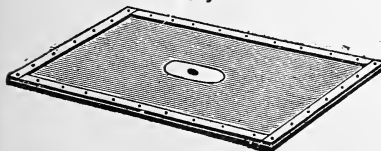
Standard 9½ Inch  
Hive Body

Standard 10 Frame	Description	Weight	Price f.o.b. here
1 Nailed and Painted	Without Frames	9 lbs.	\$1.30
1 Knocked Down	Without Frames	9 lbs.	.75
5 Knocked Down	Without Frames	47 lbs.	3.50
1 Nailed and Painted	With Frames, no Foundation	14 lbs.	2.20
1 Knocked Down	With Frames, no Foundation	14 lbs.	1.40
5 Knocked Down	With Frames, no Foundation	72 lbs.	6.50
1 Nailed and Painted	With Frames and Full Sheets	16 lbs.	3.60

Nails and Tin Rabbits Included with Bodies. No Division Board Unless Ordered.

## INNER COVER

The inner cover here shown is ¾ inch thick with a wood rim and hole, for Bee escape to be inserted when needed. No escape is furnished at the following prices.



Ten Frame	Description	Weight	Price f.o.b. here
1 Nailed	Inner Cover or Bee Escape Board	2 lbs.	\$.39
1 Knocked Down	Inner Cover or Bee Escape Board	2 lbs.	.35
5 Knocked Down	Inner Cover or Bee Escape Board	10 lbs.	1.65

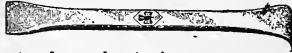
## PERFECTION BEE-BRUSH



Made of Horse Hair bristle. It will give long wear. Black bristle. 7 ozs. 40c postpaid.

## ROOT STEEL HIVE-TOOL

A very useful tool in the apiary for scraping frames and prying them loose, raising covers, etc. It is made of spring steel and will stand much strain.



70c Postpaid  
60c Postpaid

## PORTER BEE-ESCAPES

When taking off honey it is a great labor saver. It frees the supers so that no smoking is necessary. When placed between the brood chamber and super it will clear the super of bees in 12 to 24 hours.

Porter double escape without board  
Porter double escape with board nailed, 10 frames

Wt. 1 oz. 25c  
2 lbs. 60c

## SPUR WIRE-IMBEDDER

This is an excellent tool for imbedding the wires into the sheets of Foundation. There is no danger of cutting the foundation as the teeth are broad and blunt.



Price 40c postpaid. Weight 3 ozs.

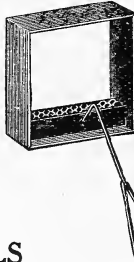
## ROOT FOUNDATION-FASTENER



These cuts show the Root Foundation fastener with lamp, and how it is used. It gives excellent results and is a rapid tool.

Root Fastener with lamp, Weight 8 ozs.—70c postpaid.

Root Fastener without lamp, Weight 2 ozs. 30c Postpaid.



## ROOT BEE-VEILS

These veils are made from the very best material and constructed with a flexible steel hoop which keeps the veil away from the face and insures perfect fitting. They are light and durable.

Veil made entirely of silk tulle 2 oz. \$1.65 Postpaid  
Veil cotton tulle with silk tulle face 3 oz. 1.25 Postpaid  
Veil cotton tulle throughout 3 oz. 1.15 Postpaid

## BEE-GLOVES

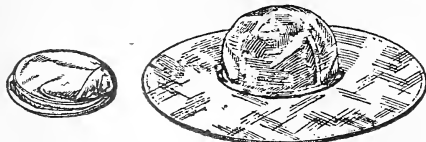
These gloves are made from material which is practically sting proof and are very durable, strongly stitched, and will stand hard wear.



Bee Gloves with Fingers

Bee Gloves with fingers (small, medium or large). Weight 1/2 lb. \$1.00 Postpaid.

## ROOT COLLAPSIBLE BEE-HAT



folded small enough to fit in the pocket. Price \$1.00 postpaid. Weight 4 ozs.

## BOOKS

ABC and XYZ of Bee Culture. The largest and most complete works on Bees in the world. The best book for all bee-keepers. 7x10 inches. Price \$3.50.

Langstroth on the Hive and Honey Bee; illustrated, 4 1/2 x 7 1/2 inches, 392 pages, Price \$1.50.

How to Keep Bees. Describes in the clearest language the necessary details, 5x7 1/2 inches, 228 pages, Price \$1.50.

First Aids to Bee-keepers. A valuable book for beginners. Price 25c.

Answers to Bee Questions Commonly Asked. Crammed with practical pointers, 72 pages. Price 10c.

Anything not listed here can be supplied at current market rates.

## SMOKERS

This is one of the most important implements in the apiary. They will burn any fuel but greasy waste is recommended as it burns better and gives a dense pungent smoke.

Standard Tin Smoker 2 lbs. \$1.60 Postpaid  
Junior Tin Smoker 1 1/4 lbs. 1.35 Postpaid

## QUEEN-EXCLUDERS (Honey-Boards)

Honey-boards are used in the production of extracted honey, to confine the queen to the brood chamber, and so prevent her from laying eggs in the supers. The spaces are just large enough to allow the working bees to get through. When sections are used the excluder is not so necessary as a queen rarely enters sections with separators.

We recommend the excluder made of wood and seven wire strips as it presents smooth round edges for the bees, instead of the sharp edges as in the perforated zinc.

Name and Size	Size	Wt. of 10	Price of 1	Price of 10
10 Frame 7 wire and wood	16 1/4 x 20	27 lbs.	85c	\$8.00
10 Frame Unbound Zinc	16 x 20	8 lbs.	43c	4.00

F. O. B. Here.

## WIRE FOR FRAMES

This wire is for securing foundation or combs in frames and to eliminate the danger of sagging. 670 feet required for 100 Hoffman Frames.

Sizes	Feet	Weight	Price Postpaid
1/4 lb. spools	350	6 oz.	25c
1 lb. spools	1,400	18 oz.	60c

## ROOT'S CALIFORNIA COMB FOUNDATION AIRCO PROCESS

Only the best wax goes into this foundation and it is thoroughly analyzed before being used.

You can't afford to be without the best.  
Price 1 lb. bx. 2 lb. bx. 5 lb. bx. 25 lb. bx. 50 lb. bx.  
Medium Brood Per 1 lb. 70c 67c 65c 63c 62c  
Thin Super " 78c 75c 73c 71c 70c



## SECTION HONEY-BOXES

Every Bee Keeper recognizes the necessity of using sections of only the very best quality when working for comb honey. These sections are polished on both sides and uniform in thickness.

The section most commonly in use is the 4 1/4 x 4 1/2 inches with 2 bee ways.

Quantity	Grade	Weight	Price f. o. b. here
100	A	7 lbs.	\$1.60
250	A	18 lbs.	3.90
500	A	35 lbs.	7.50
1,000	A	70 lbs.	15.00

## THE HOFFMAN FRAME

This is the most popular frame and is furnished with all hives unless otherwise specified. It is a self spacing frame and a great labor saver, and this particular frame can be moved without having to move others to get room. The combs are all uniformly spaced. The end bars are 3/4 inch thick, 1 inch wide at the narrowest part and 1 1/4 inches at the widest. The top bars are 1 1/16 x 19 inches long.

Foundation and starters are easily fixed in these frames.

## SHALLOW EXTRACTING-FRAMES

These are similar to the regular Hoffman frames, but with top bar 1 1/16 inch wide, 3/4 inch thick, 19 inches long with single groove. Bottom bar is 3/4 inch wide and 1/4 inch thick, the end bars are Hoffman self spacing 3/4 inch thick and 5/8 inches long.

Price of Frames, Nailed per 100—f. o. b. here:

Weight Per 100	Empty, No Wire	Empty, Wired	Full Sheets, No Wire	Full Sheets, Wired
Hoffman Frames	90 lbs.	\$11.50	\$13.00	\$31.50
Shallow Ext. Frames	50 lbs.	9.20	11.50	18.40

When ordering frames in less than 100 lots, add one fifth more to the 100 rate to cover cost of packing. If ordered with hives, no extra charge will be made.

Price of Frames, Knocked Down—f. o. b. here:

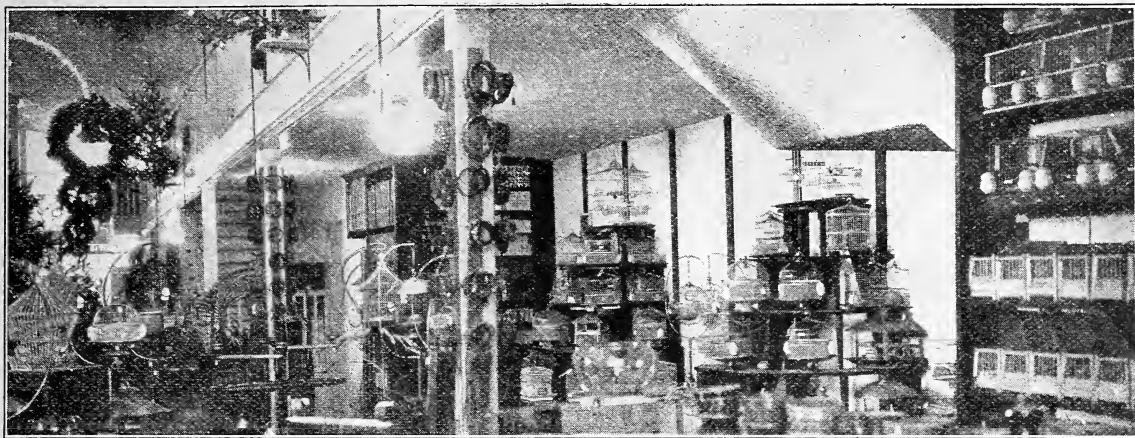
Weight	Empty, No Wire	Empty, Wired	Full Sheets, No Wire	Full Sheets, Wired
Hoffman Frames	\$ .66	100	\$6.00	27.50
Shallow Extracting	.55	5.00	22.00	

## HONEY-EXTRACTORS

This is only a 2 frame extractor made for those who have only a small number of colonies. It is a perfectly reliable machine at a small cost. The pockets do not swing therefore the combs must be taken out to reverse.

Novice Extractor: Pockets, 9 1/2 x 16; Gear Ratio, 5 to 1; Diameter, 17 in.; Weight, 78 lbs.; Price \$30.00 f. o. b. here.

# Bird Department



Birds and Bird Cages; Pet Animal Food, Remedies and Supplies

That we may add to the cheer of our many patrons that often crowd our store at 750 S. Spring Street, we have hundreds of imported Canaries that sing, warble, or roll in a most charming manner that delights the visitor. Then too, we have an aquarium of a most wonderful collection of Gold Fish.

What can be more beautiful in your living room than an aquarium of gold fish, and more interesting, with so little expense and trouble. A visit to our aquarium will be a delight to you.

See our assortment of globes and other beautiful aquariums, ornaments, waterplants, fish food, and supplies.

In this department we have for sale hundreds of canaries, all best singers, from which to choose. We have Parakeets and Parrots that are beautiful and entertaining.

We have food, remedies and requisites for Birds, fish, dogs, cats, and for all pet animals.

You are invited to visit this department if for no other purpose than to hear the canaries sing or to consult Walter H. Ellison, who is an expert in charge and always happy to talk birds.

## BIRD CAGES

## White Enamel Trimmed with Green

No. 241.	7½x7½ in.	\$2.50
No. 242.	8 x 8 in.	3.00
No. 243.	8½x8½ in.	3.25
No. 244.	9¼x9¼ in.	3.50

## All White Enamel Opal Cups

No. 170.	9 x 6 in.	\$2.50
No. 171.	9½x6½ in.	3.00
No. 172.	10 x 7 in.	3.25
No. 173.	10½x7½ in.	3.50
No. 174.	11 x 8 in.	4.00
No. 175.	11½x8½ in.	4.50

## Green Trimmed

No. 270.	9 x 6 inches	Each \$2.50
No. 271.	9½x6½ inches	3.00
No. 272.	10 x 7 inches	3.25
No. 273.	10½x7½ inches	Each 3.50
No. 274.	11 x 8 inches	4.00
No. 275.	11½x8½ inches	4.25

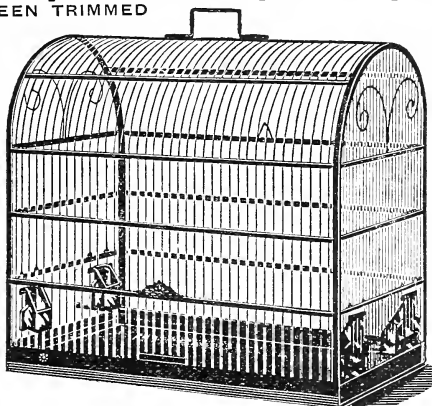
## Cleanliness

Just a word about the cleanliness in regard to your canary or canaries. A canary cannot be expected to keep clean if his cage or aviary is not kept clean. If you use a cage in the house, whenever necessary give it a washing in cold water; (hot water will remove the lacquer of a brass cage). Give the bird or birds a bath daily in summer and twice a week in winter. Take the bath dish out of the cage as soon as the bath is given. Always keep fresh, clean water in the drinking water containers. Use nothing but the very best re-cleaned seeds as feed. You will always find A & M bird seed clean and fresh. We take the bird's health into consideration when offering our bird seed for sale.

Clean the cage thoroughly daily. Be sure to scrape the perches in the cleaning. Keep a liberal supply of gravel in the bottom of the cage or aviary and be sure that the gravel is not dirty or dusty. By all means, at all times keep your bird out of drafts. Place him in a sunny place whenever possible.

If you want advice concerning your pets, see our Mr. Ellison who is in charge of this department.

## Japanned Mocking Bird Cages GREEN TRIMMED

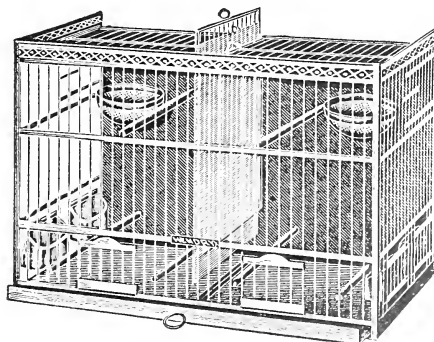


With Metal Drawer (opening in front)

16 in. long,	9½ in. wide,	14½ in. high.....	each \$ 6.00
17½ in. long,	10½ in. wide,	16½ in. high.....	each 7.00
20½ in. long,	11½ in. wide,	18½ in. high.....	each 8.00
22 in. long,	13 in. wide,	19½ in. high.....	each 9.00
24 in. long,	14½ in. wide,	21½ in. high.....	each 10.00

These Cages are suitable for Mocking Birds. Are constructed all of Metal.

## Japanned Breeding Cages GREEN TRIMMED



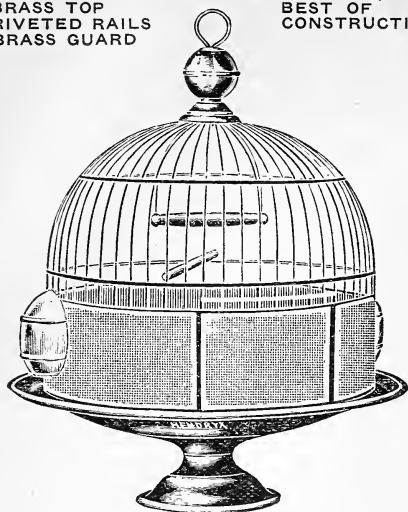
With Solid and Wire Partitions, Metal Drawer and Closed Back, 4 Glass Cups, 6 Perches and 2 Nests

17½ in. long,	8½ in. wide,	13½ in. high.....	each \$ 7.00
20 in. long,	10 in. wide,	14 in. high.....	each 8.00
22 in. long,	11 in. wide,	15½ in. high.....	each 9.00
24½ in. long,	12½ in. wide,	16½ in. high.....	each 10.00

## Brass Cages

BRASS TOP  
RIVETED RAILS  
BRASS GUARD

BEST OF  
CONSTRUCTION



No. 274. Body, 10 inches diameter.	Height, 16 in.....	\$5.00
No. 275. Body, 11 inches diameter.	Height, 16½ in.....	6.00
No. 276. Body, 11 9/16 inches diam.	Height, 18 in.....	7.00

ALSO—  
White Enamel      Green Striping      Wire Guard

No. 6. —10¼ inches diameter; height 14½ inches.....	Each	\$4.75
No. 6½. —10½ inches diameter; height 14½ inches.....	Each	5.25
No. 7. —12 inches diameter; height 14½ inches.....	Each	6.50

## CAGE SUNDRIES

Wire Bound Cloth, per ft. ....	Each	35c
Single Spring .....	15c	
Single Spring, Heavy .....	20c	
Single Spring, Extra Heavy .....	30c	
Double Spring .....	30c	
2 ft. Chain and Spring .....	30c	
10 in. Cage Hanger .....	20c	
12 in. Cage Hanger .....	25c	
Cup Open Opal .....	15c	
Cup Open Crystal .....	15c	
Cup Tulip Opal .....	20c	
Cup Tulip Crystal .....	15c	
Cup Inside Opal .....	25c	
Cup Round Opal .....	10c	
Cup Food Holder .....	10c	
Canary Baths, Opal, Large .....	20c	
Bath Houses .....	75c and 90c	
Swings, Canary .....	10c	
Wire Nest with Swivel .....	15c	
Parrot Cups, Iron Tinned .....	50c	

## PARROTS AND PAROKEETS

In season, from November to March, we offer talking parrots as follows:

Panamas, Yellow Heads and Red Heads, Cockatoos, and Amazons. We also have finger tame Bee Bees. These are lovely, tame little birds, fine for the children.

Half Moon and Shell Parokeets. We will be glad to quote prices on demand.

## A & M WONDERFUL CANARIES

We have at all times a complete showing of domestic and imported canaries, both male and female. We are exceedingly careful at all times to keep nothing but the very highest grade canaries obtainable for distribution, and can assure you that any of our birds will give complete satisfaction.

First, our imported St. Andreasberg Roller Canaries, with their soft, pleasing, beautiful bell-note that inspires the mind and brings happiness to the heart of everyone that hears them, will surely become a treasure in any home.

The prices of these wonderful songsters are \$10.00, \$12.50 and \$15.00. Some extra select at \$25.00 each. The \$25.00 Rollers make wonderful breeders and trainers. The colors of these birds range from pure yellow to a dark green. We can also supply female imported St. Andreasberg Rollers at \$5.00 each.

Second, comes the imported Hartz Mountain Triller, or Warbler Canaries. The song of these canaries is more loud than the Roller but beautiful in its variation. A great many folks like them equally as well as they do the Roller. The prices of these canaries are \$7.50 and \$10.00. Extra select for training and breeding purposes at \$15.00. The females are \$2.50 each. They have the same coloring as the Roller.

Third, comes the domestic warbler canary. These birds have a loud song similar to the imported warbler, and are of the same color variations. Our stock are all very good singers and may be kept in a cage in the house or in an outdoor aviary. The prices for the male birds are \$5.00 and \$7.50. Extra select at \$10.00. Females are priced at \$1.50 each.

## Parrot Cages

No. 70P. 12 inches diameter, 19¾ inches high.....	Each	\$ 4.75
No. 75P. 13 inches diameter, 21½ inches high.....		3.25
No. 80P. 14 inches diameter, 22 inches high.....		7.25
No. 85P. 15½ inches diameter, 24 inches high.....		9.50
No. 90P. 17½ inches diameter, 29 inches high.....		13.00

## HENDRYX BIRD CAGE STANDARDS

No. 171. Ivory stand with solid brass arm.....	\$5.25
No. 18A. Polished brass, solid brass arm.....	7.00
No. 18D. Dull brass, solid brass arm.....	7.50
No. 18B. All Bronze, solid bronze arm.....	8.00
No. 19A. Polished brass, solid brass circular arm.....	8.00
No. 19D. Dull brass, solid brass circular arm.....	8.50
No. 19B. Bronze, solid bronze circular arm.....	9.00

These stands are the very latest in bird cage stand construction and are entirely out of the ordinary in design. They are not bulky and make a pleasing fixture in any home. We might call your attention also to the very low prices of these stands.

## BIRD FOOD AND REMEDIES

(Postage Extra on all Bird Supplies)

A & M Roller Mixture. Consisting of best clean seeds.....	Per Pkg.	20c
A & M Bird Seed Mixed.....		15c
A & M Plain Canary .....	Per Lb.	15c
A & M Imported Sweet German Rape.....		25c
A & M Imported Essex Rape .....		20c
A & M Small Rape .....		15c
A & M Bird Oats .....		15c
A & M Millet, Small Yellow .....		10c
A & M Millet, Large .....		10c
A & M Canary Lettuce .....		50c
A & M Maw Seed .....		40c
A & M Thistle Seed .....		40c
A & M Sunflower Seed .....	15c—2 for	25c
A & M Parrot Food .....		20c
A & M Hemp Seed .....		10c

Canary Breeding and Train Book.....	Each	35c
Encyclopedia of Canary .....		50c
Cod Liver Oil Nesting Food (Spratts) .....		15c
Song Restorer .....		15c
Mite Powder and Blower .....		25c
Bird Bitters .....		25c
Bird Manna .....	2 for 25c—15c	
A & M Color Food .....		25c
A & M Nestling .....		25c
A & M Song Food .....		25c
Follicracker .....	Pkg.	20c
Cuttle Bone .....		05c
Mexican Foot Salve .....		25c
Ant Eggs .....		15c
A & M Gravel .....		10c
Gravel, Red .....		20c

## SPRATT'S FAMOUS DOG FOODS FOR THE DOG'S HEALTH

### Dog Cakes

5 lb. Bag .....	\$ .75	5 lb. Bag .....	\$ .85
10 lb. Bag .....	1.45	10 lb. Bag .....	1.65
25 lb. Bag .....	3.10	25 lb. Bag .....	3.60
50 lb. Bag .....	6.00	50 lb. Bag .....	7.00
100 lb. Bag .....	11.75	100 lb. Bag .....	13.75

### Fibo

### Rodmin

5 lb. Bag .....	\$ .80	5 lb. Bag .....	\$ .80
10 lb. Bag .....	1.55	10 lb. Bag .....	1.50
25 lb. Bag .....	3.35	25 lb. Bag .....	3.25
50 lb. Bag .....	6.50	50 lb. Bag .....	6.25
100 lb. Bag .....	12.75	100 lb. Bag .....	12.25

### Puppy Cakes

### Kibble Dog Cakes

5 lb. Bag .....	\$ .80	5 lb. Bag .....	\$ .80
10 lb. Bag .....	1.50	10 lb. Bag .....	1.55
25 lb. Bag .....	3.20	25 lb. Bag .....	3.35
50 lb. Bag .....	6.15	50 lb. Bag .....	6.50
100 lb. Bag .....	12.00	100 lb. Bag .....	12.75

### Ovals

Dog Cakes .....	Pkg.	\$ .35
Cod Liver Oil Cakes .....	Pkg.	.40
Charcoal Cakes .....	Pkg.	.40
Puppy Cakes .....	Pkg.	.40
Fibo .....	Pkg.	.40
Puppy Meal .....	Pkg.	.40
Bone Builder, 1 lb. tin.....		.75
Cat Food, Plain .....	Pkg.	.40
Cat Food, Milk .....	Pkg.	.40
Cat Food, Fish .....	Pkg.	.40
Pepsinated Puppy Meal, 12 oz. tins .....		.35
Orphan Puppy Meal, 14 oz. tins .....		.75
Pupnilac, large tine, 1 lb. 8 oz. ....		1.00
Pupnilac, small tins, 10 oz. ....		.50

We carry a complete line of Cat and Dog Collars, Harness Leads, Brushes, Gloves and Combs.

**CLAYTON'S DOG REMEDIES**

(Postage extra on all Dog and Cat Remedies and Supplies)

Mange Remedy	60c
Skin Lotion	60c
Hair Tonic	60c
Distemperine Liquid	60c
Condition Pills with Pepsin	60c
Blood Purifying and Cooling Tablets	60c
Digestive Tablets	60c
Laxative Pills	60c
Worm Pills	60c
Tape Worm Expeller	60c
Vermifuge Soft Capsules	60c
Vermifuge	60c
Canker Lotion	60c
Distemperine Tablets	60c
Eye Lotion	60c
Fit Remedy	60c
Cough Remedy	60c
Sulphur Tablets	60c
Puppy Tonic	60c
Rheumatic Tablets	60c
Diarrhea Remedy	60c
Chorea Tablets	60c
Ceoline Wash and Disinfectant	35c
Shampoo	25c
Killflea Soap	25c
Killflea Powder	35c
Cream Soap	25c
Ceoline Soap	25c

**DR. DELANEY'S REMEDIES**

Vermilax, Worm (Liquid), small.....\$ .65

**Gold Fish**

Just step in and see our aquarium of 1,000 beautiful gold fish. No two alike.

We have a complete line of foods and remedies for your pet dog.

If you want a thoroughbred dog write us, stating what breed you desire.

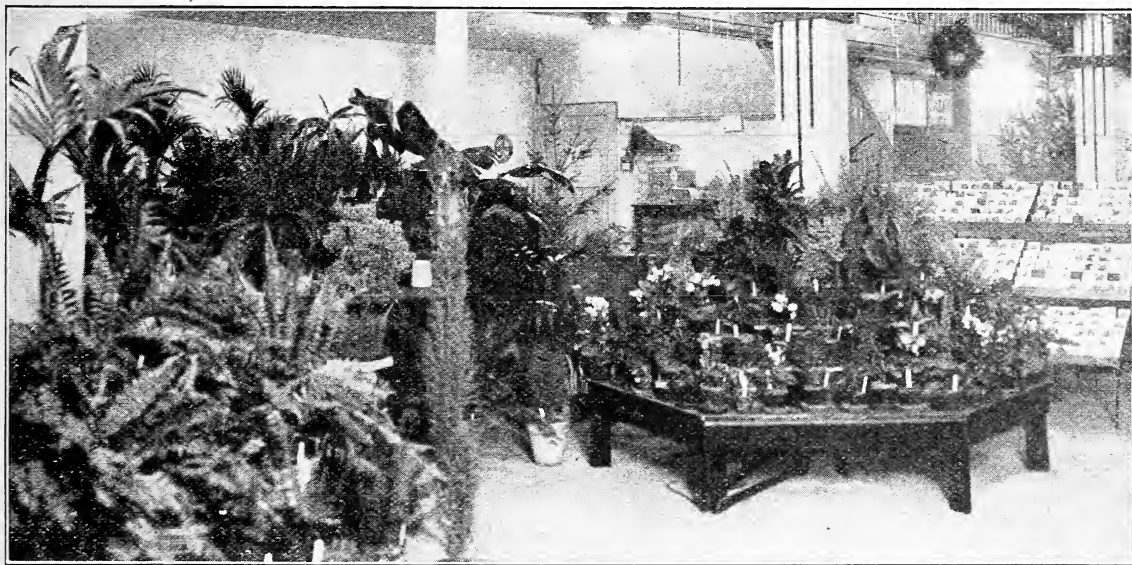
**SPRATT'S DOG REMEDIES**

(Postage extra on all Dog Remedies)

Alternative Cooling Tablets	50c
Constipation Tablets	50c
Digestive Tablets	50c
Diarrhea Tablets	50c
Distemper Tablets (Large Dogs)	75c
Distemper Tablets (For Toy Dogs and Puppies)	75c
Dip	50c
Ear Canker Ointment	50c
Eye Lotion Tablets	50c
Worm Capsules, Large Dogs	50c
Worm Capsules for Puppies	50c
Tonic and Condition Tablets	50c
Tonic and Condition Tablets for Puppies and Toy Dogs	50c

**CLAYTON'S CAT REMEDIES**

Mange Remedy	60c
Distemperine	60c
Distemperine Tablets	60c
Tonic Catnip and Condition Tablets	60c
Blood Purifier and Cooling Tablets	60c
Digestive Tablets	60c
Laxative Tablets	60c
Worm Tablets	60c
Tape Worm Expeller Tablets	60c
Vermifuge Liquid	60c
Canker Lotion Tablets	60c
Eye Lotion Tablets	60c
Fit Tablets	60c
Cough Remedy	60c
Diarrhea Tablets	60c
Mouth Wash	60c
Wash and Disinfectant	25c
Cat Soap	25c

**PLANT DEPARTMENT—750 S. Spring St.**

Plant Department in Our Store at 750 South Spring St.

Here we have on hand in their proper season, a full line of flowering plants for out door bedding, and vegetable plants for the garden. Also potted flowering plants for gift's and decorative purposes.

We invite you all, but especially do we invite those of you who have built your home and would have seeds and plants with which to make it home-like and attractive.

No plants listed here will be sent by mail. Sold only at 750 South Spring Street.

**FLOWERING PLANTS FOR OUT-OF-DOOR BEDDING**

Asters .....50c doz.	Cineraria ....	Gerbera .....50c ea. up	Marguerites 15c ea.	Salvia .....50c doz.
Armeria .....15c ea.	Celosia .....50c doz.	Gazania .....10c ea.	Marigold .....50c doz.	S'ock .....50c doz.
Ageratum .....15c ea.	Chrysanthemum .....20c ea.	(Flatted) 50c doz.	Petunia .....75c doz.	Snapdragon 50c doz.
Begonias .....50c doz.	Delphinium 75c doz.	Gaillardia .....10c ea.	Phlox:	Sweet
Coleus .....20c ea.	Dusty Miller 75c doz.	(Flatted) 50c doz.	Annual .....50c doz.	William .. 50c doz.
Cornflower .50c doz.	Double Mar-	Geranium .....15c ea.	Hardy .....15c ea.	Shasta Daisy 50c doz.
Canterbury	guerite .....15c ea.	Geum .....50c doz.	Pentstemon 75c doz.	Scabiosa .....50c doz.
Bells .....75c doz.	Dianthus .....50c doz.	Heliotrope .15c ea. up	Painted	Statice .....15c ea.
Coreopsis .....50c doz.	Dbl. Daisy .....50c doz.	Hollyhocks .75c doz.	Daisy .....50c doz.	Salpiglossis 60c doz.
Cosmos .....50c doz.	Foxglove ....75c doz.	Lantana .....15c ea. up	Pansies .....50c doz.	Vinca .....15c ea.
Carnations 1.00 doz.	Forget-	Lotus .....15c ea.	Pinks .....50c doz.	Verbena .....50c doz.
Calendula ...50c doz.	me-not .. 50c doz.	Lobelia .....50c doz.	Santolina ..75c doz.	Violets .....1.00 doz.
				Wallflower .50c ea.

# PLANTS

## The Great Opportunity for the Man with One Acre or More

You have bought  $\frac{1}{2}$  acre or more in one of the many subdivisions in or near the city. The folks that stay at home all day want to do something that will help pay for the new home, or help with household expenses. No better or more dependable solution offers itself than growing berries. There is a sure market for all you can grow, at a price that is profitable. It means extra and comparatively easy money. It is an educational training for the children.

Read the description of the various varieties, make your choice according to your soil conditions and to the space you have.

Our salesmen at our store at 750 S. Spring or at the nursery, 1934 E. 15th Street will help you with your selection.

### Remarks

Berries are not very particular as to the nature of the soil, but require ordinary drainage so that the soil will not become water-logged and sour. Should this condition occur, spade it up, apply air slacked lime at a rate of 10 lbs. to fifty feet of row and rake it in. During January a liberal application of commercial fertilizer should be applied about 10 lbs. to 100 feet of row for blackberries, 5 lbs. for strawberries. Rake the soil about the plant and cover thinly with grass cut from the lawn or with any similar mulch. Alfalfa meal is very satisfactory if used sparingly.

### The Question of Manure

Stable manure is no longer available for the small gardener or for general application about the home garden.

The best substitute for manure to apply in the garden to be spaded under is bean straw, and in larger gardens where you would wish to plant a cover crop for green manuring but do not have time to await results we recommend bean straw. It is excellent also for a surface mulch to be used for all cane berries.

For a surface dressing or mulch for covering newly planted seeds in order to retain moisture, or to prevent clay soils from baking, or to mix in soils for potted plants, etc., we recommend Alfalfa Meal with the caution that it be well mixed with the soil and applied not too liberally least it may mould or heat.

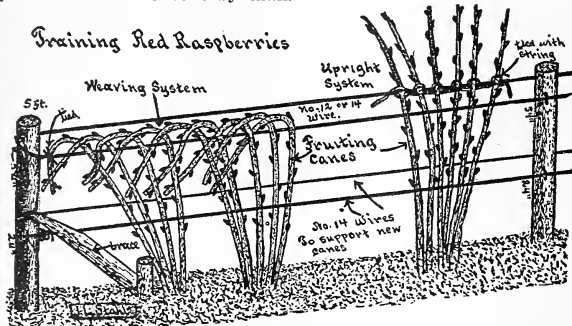
Both bean straw and alfalfa meal are easily available, clean and without offensive odor.

When bean straw or alfalfa meal has been spaded in, we recommend an application of air-slacked lime.

**Sherwin Williams Fungi-Bordo (Bordeaux Mixture)** In powdered form, mixes perfectly with cold water. For Raspberry and Strawberry blight, all fungus diseases, rust and red spider.

**Directions:** Use seven to nine pounds to fifty gallons of water. Or seven to eight tablespoonsful to one gallon of water. (1 lb. 35c) (5 lbs. \$1.50) (25 lbs. \$5.00). Write for quantity price. Cannot be sent by mail.

### Training Red Raspberries



How Berry Canes Should Be Trellised

### VEGETABLE PLANTS

	Doz.	Per 100	Per 1000
Artichoke, Green Globe.....	\$2.90	\$12.50	\$.....
Asparagus, Palmetto and Argentine.....	.50	2.50	12.00
Asparagus, Mary Washington.....	.75	3.00	15.00
*Cabbage, Winnigstadt, Danish Ballhead.....	.25	.75	4.00
*Cauliflower, Snowball, Early Pearl.....	.25	1.00	5.00
Chives.....	1 bunch	15c; 3 bunches	40c
Egg Plant, New York Spineless.....	.75	4.50	35.00
Horse Radish, Bohemian.....	.25	1.50	10.00
*Pepper, Anaheim Chili.....	.30	2.00	15.00
" Chinese Giant.....	.30	2.00	15.00
" Pimiento.....	.30	2.00	15.00
Rhubarb, Fmhbree Cherry, each 75c.....	8.00	50.00	.....
Rhubarb, Wagner's Giant.....	1.50	10.00	.....
*Sweet Potato, Yellow Jersey.....	.25	1.25	5.00
Sweet Potato, Nancy Hall.....	.25	1.50	6.00
*Tomato, A & M First Early.....	.30	1.50	10.00
" Beefsteak.....	.30	1.50	10.00
" Stone.....	.30	1.50	10.00
The Cherry Rhubarb—each 75c postpaid.			
(See front cover)			

## Plants By Mail

No plants sent by mail except at the buyer's risk.

Cash must accompany all orders for plants. No plants will be shipped C. O. D.

Owing to the expense of packing small plants for shipment by mail or express, we must request that your order for plants amount to not less than one dollar.

We exercise every care in packing to insure our stock reaching the buyer in good condition; our responsibility ceases when we deliver to post office or express company, nor can we guarantee stock to grow, as that is something over which we have no control, as we cannot be responsible for failure from defective planting, subsequent faulty treatment or cultivation and adverse weather conditions.

**Claims**—All claims must be made immediately on receipt of goods, after same have been carefully examined and, if just cause is found for complaint at such time, same will be carefully adjusted.

All orders that may go by mail will be packed free and sent postpaid as far as and including the 3rd zone; farther than that, extra postage will be required.

All orders that must go by stage or express will be delivered to the office of the carriers; the purchaser to pay transportation charges.

We will not ship any plants by freight unless so ordered by the purchaser.

### ANNOUNCEMENT

We will have in season at our store, 750 So. Spring St. an assortment of plants of flowering annuals for outdoor bedding; also Fruit Trees and Grape Vines.

When you contemplate planting these think of our store at 750 South Spring Street.

## RASPBERRIES

**Ranier** This raspberry has proven to be a real practical money maker. It is one of the big money makers for the little landers of Runnymede No. 1, near Palo Alto.

Mr. Lion of Santa Clara county has ten acres from which he ships the Ranier Raspberry to all large centers as far as Chicago.

It begins bearing in May from the canes that grew the previous year and continues bearing in marketable quantities until the latter part of August. The new canes will bear a late fall crop in October and November.

It is so prolific in mid season that unless there is an ample force of pickers many will be wasted.

Two thousand dollars is easily realized from one acre. The plants are set 3 feet apart in rows 5 feet apart. When dormant cut out all canes that are two years old and cut back the new canes to  $3\frac{1}{2}$  feet. (25c each) (\$2.00 per doz.) (\$10.00 per 100)

Read what Mr. Lion says of the Ranier Raspberry.

"It has proven a wonderful shipper. Last season \$70,000 worth of Ranier Raspberries were shipped to Chicago during the month of June.

"The average production of this berry after one year is about 100 chests per acre. One chest contains 20 drawers and weighs 60 lbs. per chest. The life of a field of the Ranier is ten years. The pruning is done during mid-winter, after which there is little expense except occasional cultivation and irrigation until picking time.

"Unless ample help is employed many berries will be lost because the crop is enormous.

"There is surely a big future for this berry because it is the only raspberry that can be shipped such a great distance, and at a time when all berries are scarce.

**La France** Introduced four years ago at the fabulous price of \$15 per doz. It is well worth the price because of its large luscious berries. The La France is indeed a luxury. We recommend it for the home garden and to the grower who commands a nearby fancy market. It is indeed a super berry. (25c each) (\$2.50 per doz.) (\$15.00 per 100).

**Cuthbert** An old standard variety, very large, fine flavor, ripens over a long period. 15c each, \$1.50 doz.

**St. Regis Everbearing** Raspberries for four months—that's what you get when you plant St. Regis.

Unlike any other raspberry, the St. Regis yields a crop of fruit the first season; planted in early April, ripens berries early in June of the same year. For four weeks thereafter the yield is heavy, and the canes continue to produce a ripe fruit freely without intermission until the middle of October. (15c each) (\$1.60 per doz.)

**The King of the Cliff** A black cap raspberry introduced by us in 1913. Since that time it has become very popular in the Van Nuys section, and everywhere it is pronounced the best black because it is more resistant to the heat of the sun than any other. Until the King of the Cliff came to California one rarely saw a black cap on the market. (15c each) (\$1.60 per doz.)

## BLACKBERRIES

**Himalaya** It is wonderfully productive. If kept well pruned the berries are large and deliciously sweet. It is enormously productive, bearing from June until frost.

**Culture**—If trained to grow on a trellis of wire stretched across the field about 5 feet high, they should be planted 10 feet apart in rows 8 feet apart. Not more than four canes from each plant. As soon as the canes have reached the desired length they should be cut thus producing fewer, but larger fruit. (20c each) (\$1.50 per doz.)

**Cory's Thornless** We do not hesitate to recommend this variety above all others, not alone because it is thornless, but because the berries are enormously large, very sweet, and the plant is enormously prolific. We advise the same culture as for the Himalaya, except the trellis should be 4 feet high. (25c each) (\$2.60 per doz.)

**Mammoth** Strong grower and heavy bearer. Berries large, highly flavored and very sweet. Ripens early and fruits over a long period. Should also be grown on a trellis. Highly recommended. 20c each, 50c doz.

**Crandall's Early** This old variety has been very popular for more than 30 years. It bears berries from June until August and another crop in the late fall. Upright growth, a large round berry and very sweet. (15c each) (\$1.60 per doz.)

**Macatawa** For very early, medium and for very late; nearly an everbearing blackberry, very sweet and solid, is a good shipper. The berries are very large. The canes grow upright and should be planted 5 feet apart in rows 8 feet apart. (15c each) (\$1.60 per doz.) postpaid.

## LOGANBERRIES

This berry is largely used for pies, for canning, and making preserves. It has the appearance of a large raspberry, the blended flavor of raspberry and dewberry. It is so prolific that a single vine will often bear 100 boxes of berries. For a home garden a few vines trellised along a fence will be sufficient, but for commercial planting set the plants five feet apart in rows six feet apart and train to grow on trellis the same as Himalaya, except the trellis should be four feet high. (20c each) (\$2.00 per doz.)

## DEWBERRIES

**Gardena** This berry is a favorite wherever it is grown. A favorite with the grower because it is prolific, and a favorite with the consumer because it is very sweet. Culture the same as for Himalaya blackberries except the trellis should be higher than 2 feet.

Early in the spring the vines are covered with a mass of bloom, soon yielding an immense crop of delicious berries. (20c each) (\$1.60 per doz.) postpaid.

**Lucretia** A delicious berry, it is very popular. A very large acreage is grown by the berry growers in Southern California. (20c each) (\$1.60 per doz.)

## GRAPES

We have a complete assortment of grapes. All varieties (25c each) (\$2.50 per doz.) (\$10.00 per 100) postpaid. (\$30.00 per 1000) f. o. b. here.

## STRAWBERRIES

A small plot of strawberries with proper culture would do more toward reducing the mortgage than any other crop. Prior to 1914 the price from day to day throughout the season was 5c per box delivered at your door, and 3c per box at the field if a full crate was purchased. The price since that time has been 15 to 20c per box, so you can readily believe there is much money to be made by growing strawberries if you need not pay for the picking, but do all the labor yourself.

First consider what help you can count upon for picking, then apportion your acreage accordingly.

The present method of setting plants a few inches apart on little narrow ridges too close to permit of irrigating without uncovering the roots is not conducive to best results.



This picture taken October 1st shows a field of Carolinas set out March 10th. Though less than seven months old has borne a full crop of berries. Notice enormous growth of runners.

**Carolina** is the best shipper and all round profitable berry of them all. We herewith print a letter from Rivers Bros. to one of their growers: May 25, 1923.

"In reply to your inquiry regarding the Carolina Strawberry, will say that while this berry is still new with us in Southern California it is holding its own very well with the Klondike and in our opinion it is a much more satisfactory berry for shipping and is meeting with a very favorable demand."

RIVERS BROS. CO., Inc. (Signed H. D. Rivers.)  
The Carolina holds its berries well off the ground and the enormous growth of foliage shades the berry. It is our opinion that no variety sends out such a profusion of runners. (30c per doz.) (\$1.50 per 100) postpaid. (\$12.00 per 1,000) f. o. b. here.

**Improved Klondike** differs from the Klondike in that it is a larger berry. It is a good shipper and very prolific. It yields over a long period. (30c per doz.) (\$1.50 per 100) postpaid. (\$12.00 per 1,000) f. o. b. here.



**Progressive** In 1915 we offered four varieties of Everbearing Strawberries, all described as having perfect blossoms and highly recommended.

Of the four varieties only one, the Progressive is popular today, because it had the merit to win out against all other improved varieties. The Progressive too, has been improved until clusters illustrated in this picture are the rule rather than the exception.

The Progressive is deservedly popular because it is a wonderful strawberry in yield, in flavor and as a money maker.

(50c per doz) (\$3.00 per 100) postpaid. (\$15.00 per 1000) f. o. b. here.

E. W. Jamison of Ontario realized from ¼ acre of Progressive Strawberries \$500 during a harvest time that extended from March until November.

**Banner** (The same or similar to New Oregon.) One of the most delicious strawberries without a trace of acid. It is grown extensively for the San Francisco market, more of them should be grown here. (30c per doz.) (\$2.00 per 100) postpaid. (\$14.00 per 1,000) f. o. b. here.

**Missionary** This variety is very popular throughout the east on account of its long season of bearing. Planted during February, it will mature berries early in April and continue until August. The berry is sweet and in shape very much resembling the Carolina. (40c per doz.) (\$2.00 per 100) postpaid. (\$14.00 per 1,000) f. o. b. here.

# INDEX

A		E		N	
	Page		Page		Page
Alfalfa .....	73	Egg Boxes .....	87	Napier Grass .....	74
Alfileria .....	71	Egg Carrier .....	87-88	Nico Dust .....	80
Artichokes .....	6	Egg Plant .....	19	Nursery Stock .....	93-95
Asparagus .....	7	Egg Scales .....	87		
Asparagus Bunchers .....	7	Egg Tester .....	87		
Asparagus Tave .....	7	Egyptian Corn .....	74		
Australian Salt Bush .....	71	Endive .....	19		
B		F		O	
	Page		Page		Page
Bacteria .....	73	Feeders .....	87	Oats .....	76
Barley .....	76	Fencing .....	88	Okra .....	39
Barrel Pumps .....	81	Fertilizers .....	77	Onions .....	27-28
Beans—Bush .....	8-9	Fe'erita .....	74	Onion Sets .....	23
Beans—Butter .....	20	Fish—Cold .....	93	Orchard Grass .....	71
Beans—Lima .....	10	Flax .....	76		
Beans—Pole .....	9-10	Flower Seeds .....	40-63		
Beans—Commercial .....	10	Founts—All Kinds .....	87		
Beans—Soy .....	72	Fruit Pickers .....	83		
Beans—Windsor .....	72				
Bee Supplies .....	89-90				
Bee's—Stock .....	11				
Beets—Table .....	11				
Bermuda Grass .....	70-71				
Birds and Supplies .....	91-92				
Blue Grass .....	75				
Books—Agriculture .....	12				
Books—Poultry .....	12				
Bone Mills .....	86				
Black Leaf 40 .....	79				
Broccoli .....	12				
Brome Grass .....	71				
Brooders .....	85				
Brooder Heaters .....	85				
Boxes Shipping .....	88				
Broom Corn .....	76				
Brussels Sprouts .....	12				
Buckwheat .....	76				
Buhach Powder .....	88				
Bulletins, U. S. .....	3				
C		G		P	
	Page		Page		Page
Cages .....	91-92	Garden Tools .....	84	Parsley .....	30
Cabbage .....	13	Garlic .....	28	Parsnips .....	30
Cabbage—Chinese .....	12	Gopher Scent .....	82	Peanuts .....	20
Calendar for Planting .....	5-6	Gopher Exterminator .....	82	Peas—Garden .....	29
Canary .....	75	Gourds .....	20	Peas—Field .....	72
Cane .....	74	Grafting Wax .....	83	Peppers .....	31
Caponizing Sets .....	87	Grasses—Field .....	70	Perennial Rye .....	70
Carrots—Stock .....	15	Grasses—Lawn .....	70	Plant Covers .....	22
Carrots—Table .....	15	Grinders .....	86	Planting Calendar .....	5-6
Cat Supplies .....	93			Plants—No. per Acre .....	6
Cauliflower .....	14			Plant Setter .....	82
Celery .....	15			Potato Digger .....	32
Celery Tape .....	15			Potatoes—Irish .....	32
Celeriac .....	15			Pots—Planting .....	83
Chard—Swiss .....	12			Poultry Remedies .....	88
Chayote .....	18			Protectors—Tree .....	83
Chervil .....	18			Pumpkins .....	33
Chicory .....	19			Punches—Poultry .....	87
Citron .....	26				
Clover—Alsike .....	70				
Clover—Hubam .....	70				
Clover—Sweet (Alba) .....	72				
Clover—Sour (Indica) .....	72				
Clover—Red .....	70				
Clover—White .....	70				
Collards .....	18				
Corn Salad .....	18				
Corn—Field .....	75				
Corn—Pop .....	16				
Corn—Sweet .....	16				
Corn Planters .....	82				
Corn Sheller .....	82				
Coops—Shipping .....	88				
Cotton .....	76				
Cover Crops .....	72				
Covers—Plant .....	22				
Cow Peas .....	72				
Cress .....	18				
Cucumbers .....	17				
Cultivators .....	84				
Cutters—Bone .....	86				
Cutters—Clover .....	86				
D		H		R	
	Page		Page		Page
Dallas Grass .....	71	Harding Grass .....	70	Raffia .....	83
Dog Supplies .....	92-93	Hemp .....	75	Radish .....	34
Dusters—Sulphur Powder .....	80	Herbs .....	18	Rape .....	75-76
Drinking Founts .....	87	Higera .....	74	Red Top Grass .....	70
		Hoes .....	84	Rhodes Grass .....	71
		Hot Bed .....	4	Rhubarb .....	76
		Hovers .....	5	Rice .....	76
		Hygrometers .....	85	Roselle .....	35
				Rutabaga .....	39
				Rye—Winter .....	76
				Rye Grass .....	70-71
I		K		S	
	Page		Page		Page
Incubators .....	85	Kaffir Corn .....	74	Salsify .....	35
Insecticides .....	78-79	Kale .....	20	Seeders .....	82-84
Italian Rye Grass .....	70	Kohl Rabi .....	19	Sherwin-Williams Products .....	78-79
		Knives .....	87	Soil Renovators .....	82
		Kikiyu Grass .....	74	Smilo Grass .....	71
				Shallu .....	70
				Sorghums—Saccharine .....	74
				Sorghums—Non-Saccharine .....	74
				Sorrel .....	35
				Spinach .....	36
				Sprayers—All Kinds .....	81
				Squash .....	36
				Squirrel Exterminators .....	82
				Sudan .....	71
				Sulphur .....	79
L		M		T	
	Page		Page		Page
Labels—Pot and Tree .....	83	Masters Plant Setters .....	82	Tobacco .....	76
Lawn Grass .....	70	Melons—Culture .....	22	Tomatoes .....	37-39
Leek .....	28	Melons—Casabas .....	23	Traps .....	82
Lettuce .....	21	Melons—Musk .....	24	Tree Labels .....	83
Leg Bands .....	88	Melons—Water .....	25-26	Tree Protectors .....	83
Lime .....	77	Melon Covers .....	22	Tree Seeds .....	64
		Melilotus Alba .....	72	Thermometers .....	85
		Melilotus Indica .....	72	Turnips .....	39
		Millet .....	75		
		Mills .....	86		
		Milo Maize .....	74		
		Moss .....	83		
		Mulford Culture .....	73		
		Mushrooms .....	26		
		Mustard .....	26		
V		W		Y	
	Page		Page		Page
Vetch .....	72	Weeders .....	83	Yolo .....	74
		Wheat .....	76		
		Wonder Forage .....	74		
		Wire Netting .....	88		

**NOTICE**—In order to avoid delay, please send your remittance by Postal Money Order or Bank Draft, rather than your personal check, so as to save the usual bank clearing period.

MAIN OFFICE, SHIPPING DEPARTMENT, AND MAIL ORDER DEPARTMENT  
AT THE WAREHOUSE: 1934 EAST 15th STREET.  
MAIN RETAIL STORE: 750 SOUTH SPRING STREET.  
MARKET BRANCH: 767 SOUTH CENTRAL AVENUE.

(OVER)

EXTRA ORDER SHEETS AND RETURN ENVELOPES FURNISHED ON REQUEST

[illegible]

NOTICE: Please write below the names of any of your neighbors who would be interested in our catalog.

This image shows a single sheet of white paper with horizontal blue or grey ruling lines. The lines are evenly spaced and run across the width of the page. There is no handwriting or other markings on the paper.

# A & M Planting Calendar for Southern California and Similar Climates

## JANUARY

**VEGETABLES**—Seeds of Asparagus, Beans, Beets, Brussel Sprouts, Cabbage, Carrots, Chervil, Chicory, Corn Salad, Cress, Egg Plant, Horse Radish, Kale, Kohl Rabi, Lettuce, Mustard, Onions, Parsley, Peas, Peppers, Potatoes, Radish, Rhubarb, Salsify, Spinach, (Winter) Tomatoes, Turnips.

**FLOWERS**—Sow seeds of hardy annuals in the open ground, Acroclium, Alyssum, Antirrhinum, Calendula, Calliopsis, Candytuft, Centaurea, Annual Chrysanthemums, Clarkia, Larkspur, Lupin, Mignonette, Nicotiana, Poppies, California Poppy, Wild Flower Seed and Sweet Peas.

**PLANTS** of Aquilegia, Antirrhinum, Canterbury Bells, Carnation, Digitalis, Pansy, Pentstemon, Shasta Daisy, Stocks.

**BULBS** of Amaryllis, Agapanthus, Caladium, Gladiolus, Liliums, Narcissus, Ranunculus and Tuberoses.

## FEBRUARY

**VEGETABLES**—Seeds of Asparagus, Beets, Beans, Cabbage, Carrots, Celery, Chervil, Chives, Chicory, Corn, Cress, Corn Salad, Cucumbers, Egg Plant, Horse Radish, Kale, Kohl Rabi, Lettuce, Mustard, Onions, Parsnip, Peas, Peppers, Potatoes, Sweet Potatoes, Squash, Radish, Rhubarb, Salsify, Spinach, (Summer) Tomatoes, Turnips.

**FLOWERS**—Sow seeds in open ground; Acroclium, Antirrhinum, Calendula, Calliopsis, Centaurea, Early Flowering Cosmos, California Poppy, Larkspur, Linum, Lupinus, Mignonette, Nemophila, Nicotiana, Poppies, Scabiosa and Sweet Peas. Sow in seed boxes—Balsam, Begonia, Coreopsis, Gaillardia, Hollyhock, Hunnemannia, Lobelia, Mimulus, Pentstemon, Petunia, Perennial Poppies, Salvia, Stocks and Viola Cornuta.

**PLANTS** of Aquilegia, Antirrhinum, Carnation, Canterbury Bells, Digitalis, Pansy, Pentstemon, Shasta Daisy, Stocks, Verbena.

**BULBS** of Amaryllis, Caladium, Cannas, German Iris, Gladiolus, Liliums, Ranunculus and Tuberoses.

## MARCH

**VEGETABLES**—Seeds of Artichoke, Asparagus, Beets, Beans, Cabbage, Chives, Chicory, Chervil, Corn, (Sweet and Field) Cucumbers, Egg Plant, Kale, Lettuce, Melons, (Musk and Water) Okra, Onions, Parsley, Parsnip, Potatoes, Sweet Potatoes, Pumpkin, Radish, Rhubarb Seed, Salsify, Spinach, (Summer) Squashes, Tomatoes.

**FLOWERS**—Sow seeds in open ground; Acroclium, Ageratum, Alyssum, Antirrhinum, Arctotis, Amaranthus, Balsam, Brachycome, Bartonia, Calendula, Calliopsis, Candytuft, Centaurea, Clarkia, Annual Chrysanthemum, Early Flowering Cosmos, Daisies, Four O'Clocks, Godetia, Gomphrena, Gypsophila, Helichrysum, Larkspur, Linum, Lupin, Marigold, Mignonette, Nasturtium, Nemesis, Nemophila, Nicotiana, Phlox, Poppy, Scabiosa, Sunflower and Sweet Peas.

Sow in seed boxes or with some protection for transplanting later: Asters, Begonia, Beets, Daisies, Celosia, Columbine, Canterbury Bells, Coreopsis, Cyclamen, Dahlia, Gaillardia, Gerbera, Heliotrope, Hunnemannia, Lobelia, Matricaria, Myosotis, Pentstemon, Petunia, Poppies, Salvia, Shasta Daisy, Statice, Sweet William, Verbena, Viola, Wallflower, Zinnia. Sow seeds of Vines.

**PLANTS** of Begonia, Delphinium, Gerbera, Pansy, Romneya Coulteri, Shasta Daisy and Verbena. Roses.

**BULBS** of Caladiums, Cannas, Dahlias, Gladiolus, Tuberoses.

## APRIL

**VEGETABLES**—Seeds of Artichoke Seed, Asparagus, Beets, Beans, Carrots, Cabbage, Celery, Chives, Chervil, Corn, (Sweet and Field) Cress, Cucumbers, Egg Plant, Kale, Lettuce, Melons, (Musk and Water) Okra, Onions, Parsley, Peas, Peppers, Parsnip, Potatoes, Sweet Potatoes, Pumpkin, Radish, Rhubarb Seed, Salsify, Spinach (Summer) Squash, Tomatoes.

**FLOWERS**—Seeds of Abronia, Acroclium, Ageratum, Antirrhinum, Amaranthus, Asters, Balsam, Aquilegia, Begonia, Bellis, Brachycome, Calendula, Calliopsis, Candytuft, Canterbury Bells, Carnation, Annual Chrysanthemum, Celosia, Centaurea, Clarkia, Coreopsis, Cosmos, Cyclamen, Dahlia, Daisies, Delphinium, Digitalis, Dianthus, Gaillardia, Godetia, Gerbera, Gypsophila, Gomphrena, Heliotrope, Helichrysum, Hunnemannia, Hollyhock, Larkspur, Lobelia, Linum, Lupin, Marigold, Myosotis Mirabilis, Mimulus, Mignonette, Nasturtium, Nemesis, Nicotiana, Nicotiana, Pentstemon, Petunia, Phlox, Poppies, Portulaca, Salvia, Salpiglossis, Scabiosa, Schizanthus, Stevia, Stocks, Statice, Sweet William, Verbena, Viola, Sunflower, Wallflower, Zinnia.

**PLANTS** of Begonia, Chrysanthemum, Columbine, Delphinium, Gerbera, Pansy, Petunia, Romneya Coulteri, Shasta Daisy, Vine Seeds.

**BULBS** of Cannas, Caladiums, Dahlia, Gladiolus and Tuberoses.

## MAY

**VEGETABLES**—Seeds of Artichoke, Asparagus, Beets, Beans, Cabbage, Carrots, Celery Plants, Corn, (Sweet and Field) Cucumber, Egg Plant, Lettuce, Melons, (Musk, Water, and Casabas) Okra, Onions, Parsley, Parsnip, Peas, Peppers; Transplant Potatoes, Sweet Potatoes (Plants) Pumpkin, Radish, Rhubarb, Salsify, Spinach, (Summer) Squash, Tomato.

**FLOWERS**—Seeds of Abronia, Acroclium, Ageratum, Amaranthus, Asters, Balsam, Carnation, Calendula, Celosia, Centaurea, Calliopsis, Cosmos, Daisies, Annual Chrysanthemum, Candytuft, Dianthus, Gaillardia, Gomphrena, Gypsophila, Helichrysum, Hunnemannia, Lobelia, Larkspur, Marigold, Matricaria, Nasturtium, Nemesis, Nicotiana, Nicotiana, Nicotiana, Petunia, Phlox, Salvia, Salpiglossis, Scabiosa, Schizanthus, Stevia, Sunflower, Statice, Zinnia.

**PLANTS** of Antirrhinum, Begonia, Bellis Daisy, Coreopsis, Carnation, Chrysanthemum, Dahlia, Delphinium, Gaillardia, Gerbera, Hollyhocks, Myosotis, Petunia, Pentstemon Salvia, Verbena and Zinnia. Sow Vine Seeds.

**BULBS** of Cannas, Dahlia, Gladiolus, Tuberoses.

## JUNE AND JULY

**VEGETABLES**—Seeds of Artichoke, Beets, Beans, Cabbage, Carrots, Celery Plants, Corn, (Sweet and Field) Cucumber, Egg Plant, Lettuce, Melons, (Musk, Water and Casabas) Okra, Parsnip, Parsnip, Peas, Pepper Plants, Potatoes, Sweet Potatoes, (Plants) Pumpkin, Radish, Spinach (Summer) Tomato.

**FLOWERS**—Seeds of Calendula, Candytuft, Cosmos, Centaurea, Cineraria, Daisies, Marigold, Nasturtium, Portulaca, Poppies, Salpiglossis, Zinnia.

**PLANTS** of Asters, Ageratum, Begonia, Bellis, Calendula, Carnation, Chrysanthemum, Cosmos, Dahlia, Daisy, Marigold, Pansy, petunia, Pentstemon, Salvia, Stocks, Zinnia.

**BULBS** of Gladiolus, Tuberoses.

## AUGUST

**VEGETABLES**—Artichoke, Beets, Beans, early varieties, Brussel Sprouts, Cabbage, Cauliflower, Carrots, Chervil, Chives, Chicory, Corn, Cress, Cucumber, Egg Plant, Endive, Garlic, Kale, Kohl Rabi, Leek, Lettuce, Mustard, Onion, Parsley, Parsnip, Peas, Pepper, Potatoes, Radish, Salsify, Spinach, (Summer) Tomatoes, Turnips.

**FLOWERS**—Calendula, Cineraria, Centaurea, Cosmos, Pansies, Primula, Stocks, Sweet Peas. Begin sowing seeds of hardy perennials for next year's flowering, such as Aquilegia, Bellis, Daisy, Canterbury Bells, Coreopsis, Cyclamen, Delphinium, Digitalis, Forget-me-not, Gaillardia, Hollyhocks, Pentstemon, Perennial Poppies, Phlox, Pyrethrum, Snapdragon, Verbena, Viola and Wallflower.

**PLANTS** of Cineraria, Stocks, Pansies, Violets.

**BULBS** of Freesias, Callas, Ranunculus.

## SEPTEMBER

**VEGETABLES**—Seeds of Artichoke, Beets, Beans, Brussel Sprouts, Cabbage, Carrots, Cauliflower, Chervil, Chives, Chicory, Cress, Cucumber, Egg Plant, Endive, Garlic, Kale, Kohl Rabi, Leek, Lettuce, Mustard, Onions, Parsley, Parsnip, Peas, Peppers, Potatoes, Radish, Salsify, Spinach, (Winter) Squash, Tomatoes, Turnips.

**FLOWERS**—Seeds of Calendula, Centaurea, Cineraria, African Daisy, Nemesis, Cosmos, Linum, Pansy, Primula, Stocks and Winter Sweet Peas. Continue sowing hardy perennials for next year's flowering, such as Aquilegia, Bellis Daisy, Canterbury Bells, Coreopsis, Cyclamen, Delphinium, Digitalis, Forget-me-not, Gaillardia, Hollyhocks, Petunia, Pentstemon, Perennial Poppies, Phlox, Pyrethrum, Snapdragon, Verbena, Viola and Wallflower.

**PLANTS** of Cineraria, Stocks, Pansies, Violets.

**BULBS** of Callas, Freesias, Ranunculus, Gladiolus, German Iris, Paper White Narcissus, Watsonias, Oxalis, Ixias.

## OCTOBER

**VEGETABLES**—Seeds of Beets, Beans, Brussel Sprouts, Cabbage, Carrots, Cauliflower, Chervil, Chives, Chicory, Cress, Egg Plant, Endive, Garlic, Kale, Kohl Rabi, Leek, Lettuce, Mustard, Onions, Parsley, Parsnip, Peas, Radish, Salsify, Spinach, Turnips.

**FLOWERS**—Continue sowing seeds for winter blooming of Calendula, Centaurea, Cineraria, Cosmos, African Daisies, Dianthus, Nemesis, Phlox, Pansy, Primula, Scabiosa, Stocks, and Winter Sweet Peas.

Begin sowing annuals in open ground for early spring blooming, Acroclium, Alyssum, Antirrhinum, Bartonia, Candytuft, Calliopsis, Clarkia, Annual Chrysanthemums, California Poppy, Larkspur, Linum, Lupin, Mignonette, Nicotiana, Poppies, California Wild Flowers. Continue sowing perennials for next year's flowering—Aquilegia, Bellis, Canterbury Bells, Coreopsis, Cyclamen, Delphinium, Digitalis, Forget-me-not, Gaillardia, Hollyhocks, Pentstemon, Petunia, Perennial Poppies and Phlox, Pyrethrum, Snapdragon, Verbena, Viola and Wallflower.

**PLANTS** of Cineraria, Pansies, Stocks, Violets.

**BULBS** of Anemones, Amaryllis, Callas, Crocus, Freesias, Hyacinths, Ixias, Narcissus, Oxalis, Ranunculus, Spanish Iris, Sparaxis, Tulips, Watsonias, Easter Lillies, German Iris, Montebretias, Gladiolus.

## NOVEMBER

**VEGETABLES**—Seeds of Beets, Beans, Brussel Sprouts, Cabbage, Carrots, Cauliflower, Chervil, Chicory, Chives, Cress, Garlic, Kale, Kohl Rabi, Lettuce, Leek, Mustard, Onions, Parsley, Peas, Radish, Salsify, Spinach (Winter) Turnips.

**FLOWERS**—Seeds of hardy annuals, Acroclium, Alyssum, Antirrhinum, Bartonia, Calendula, Candytuft, Calliopsis, Clarkia, Annual Chrysanthemums, California Poppy, Dianthus, Larkspur, Lupin, Mignonette, Nicotiana, Nemesis, Petunia, Pansy, Phlox, Stocks, Winter Sweet Peas and California Wild Flowers.

**PLANTS** of Carnation, Canterbury Bells, Cineraria, Columbine, Foxglove, Pansies, Pentstemon, Snapdragon, Stocks, Verbena, Violets.

**BULBS** of Amaryllis, Anemones, Callas, Crocus, Freesias, Hyacinthus, Ixias, Narcissus, Oxalis, Ranunculus, Spanish Iris, Sparaxis, Tulips, Watsonias, Lilies, Freesias, German Iris, Gladiolus.


## DECEMBER

**VEGETABLES**—Artichoke Plants, Asparagus Roots, Seeds of Beets, Beans, Brussel Sprouts, Cabbage, Cauliflower, Chervil, Chicory, Chives, Cress, Endive, Garlic, Horse Radish, Kale, Kohl Rabi, Leek, Lettuce, Mustard, Onions, Parsley, Parsnips, Peas, Potatoes, Radish, Rhubarb Roots, Salsify, Spinach (Winter) Turnips, Onion sets.

**FLOWERS**—Sow seeds of hardy annuals, Acroclium, Alyssum, Antirrhinum, Bartonia, Calendula, Candytuft, Calliopsis, Clarkia, Annual Chrysanthemums, California Poppy, Dianthus, Larkspur, Lupin, Mignonette, Nicotiana, Nemesis, Pansy, Phlox, Stocks, Winter Sweet Peas and California Wild Flowers.

**PLANTS** of Carnation, Canterbury Bells, Columbine, Foxglove, Pansies, Pentstemon, Snapdragon, Stocks, Shasta Daisy, Verbena, Violets.


**BULBS** of Amaryllis, Callas, Gladiolus, Hyacinths, Narcissus, Ranunculus, Tulips, Watsonia, Lilies.



A & M  
*Prince of Wales*  
*Gladiolus*



A & M  
*Single Annual Chrysanthemums*  
(Painted Daisies)



A & M  
*Giant Spencer*  
*Sweet Peas*